

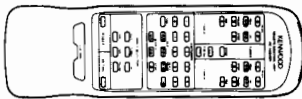
* Refer to parts list on page 29.

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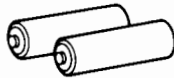
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Accessories

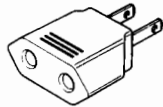
Remote control unit 1
(X94-1000-11)



Batteries
(R03/UM-4/"AAA")..... 2



AC plug adaptor..... 1
(Except for some areas.)
For the unit with a European AC plug in areas other than Europe.



Instruction manual

B60-0608-00	ENGLISH	
B60-0609-00	FRENCH	E
B60-0610-00	GERMAN	E
B60-0611-00	DUTCH	E
B60-0612-00	ITALIANO	E
B60-0613-00	SPANISH	M
B60-0652-00	CHINESE	M

Item carton case

H50-0145-04

Polystyrene foamed fixture

H10-5184-02 L
H10-5185-02 R

When the protection circuitry is enabled , the output power ceases and the message, "P. OFF" is displayed.

Remote control operation keys

Operation keys for KENWOOD components connected by System Control cords

TAPE A operation keys

These keys perform the same operations as the corresponding keys on the cassette deck. However, operations requiring simultaneous pressing of two keys are not possible. These keys are used for operating Deck A of a double-cassette deck.

TUNER operation keys

TAPE B operation keys

These keys perform the same operations as the corresponding keys on the cassette deck. However, operations requiring simultaneous pressing of two keys are not possible. These keys are used for operating a single-cassette deck or Deck B of a double-cassette deck.

Numeric keys

When the INPUT SELECTOR is set to TUNER: These keys are used for specifying preset station numbers. When the INPUT SELECTOR is set to CD: These keys are used for direct tune selection.

CD player operation keys

INPUT SELECTOR keys

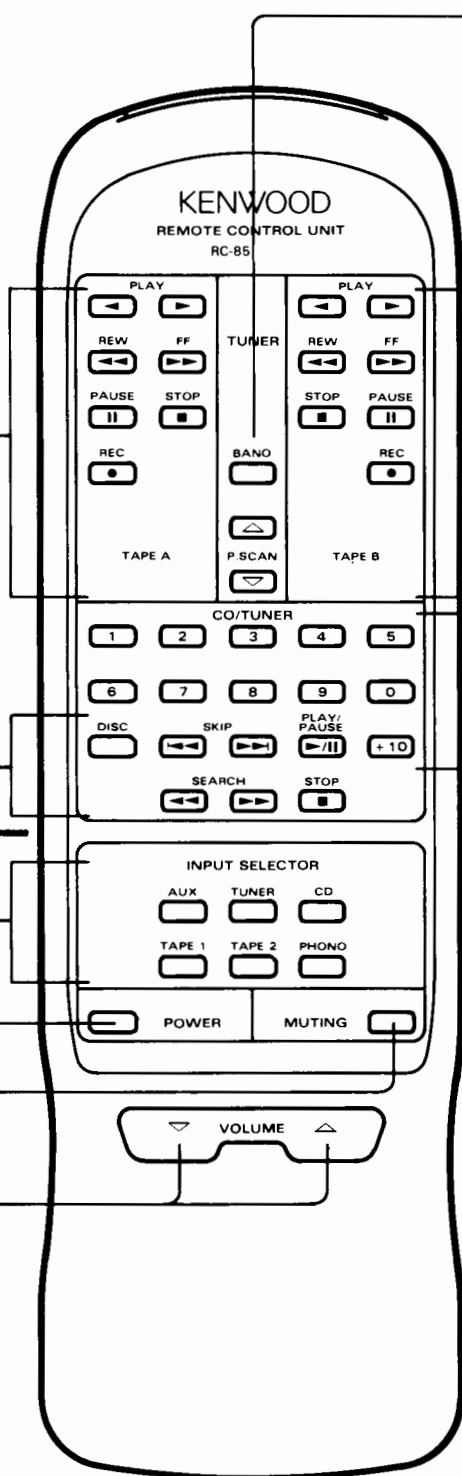
POWER key

MUTING key

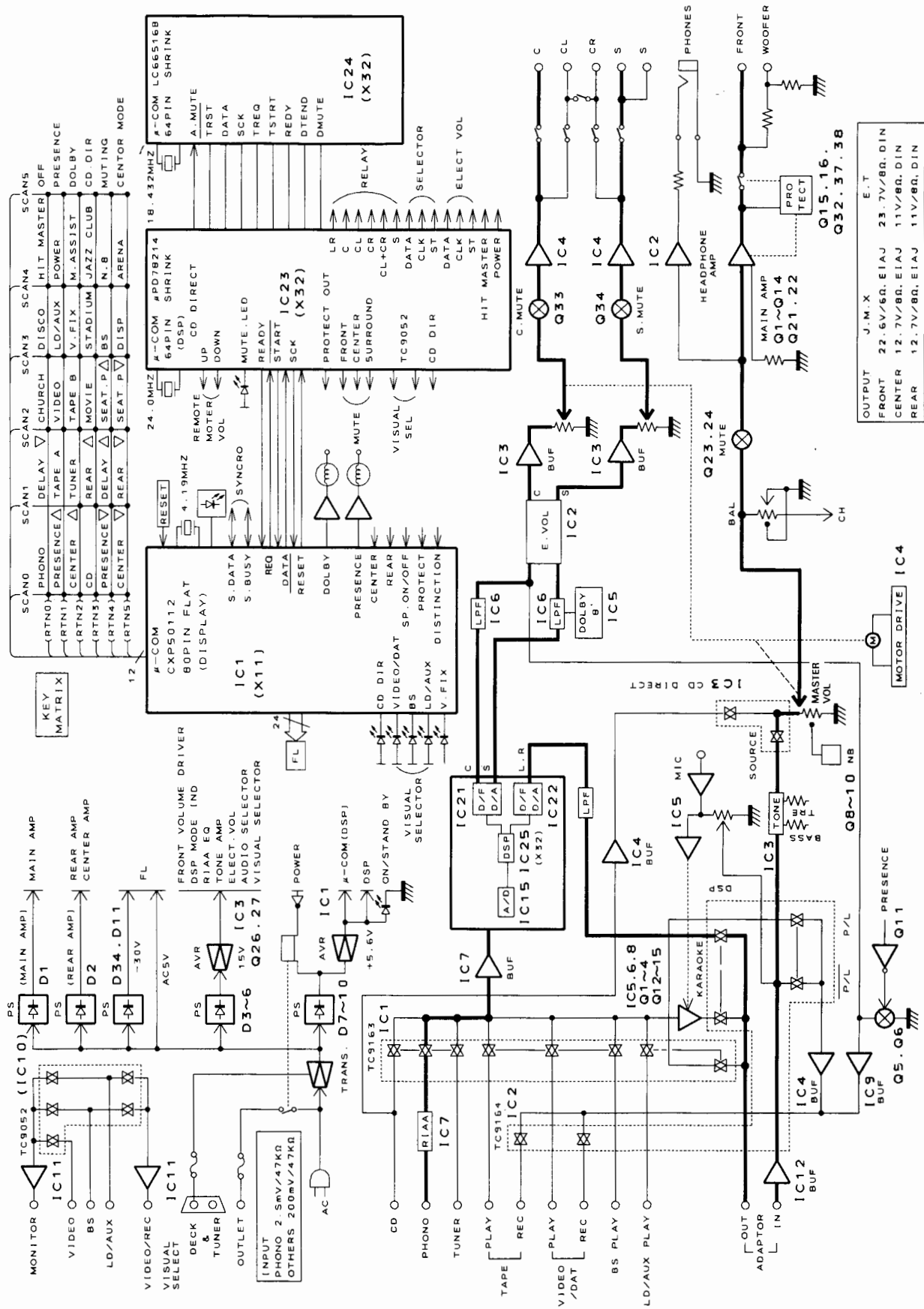
VOLUME UP Δ , DOWN ∇ keys

A-85 Operation keys

These keys have the same function as the corresponding keys on the main unit.



BLOCK DIAGRAM



CIRCUIT DESCRIPTION

TEST MODE

The test mode in A-85 consists of the following two modes:
 Test 1....Mode in which all FL and LED indicators go on.
 Test 2....Mode in which the RAM contents are initialized.

Auxiliary 1

Transits from the Test 1 state to the surround test modes.

- a) MASTER VOLUME
- b) CENTER VOLUME
- c) REAR VOLUME
- d) PRESENCE VOLUME
- e) DELAY TIME
- f) SEAT POSITION
- g) DOLBY TEST TONE

Auxiliary 2

Discriminates ROXY and MIDI by the BS selector display in the test mode.

ROXY: [BS]

MIDI: [DBS]

Setting

1) Test 1

Insert the AC plug into a receptacle while pressing the CD key.

2) Test 2

Insert the AC plug into a receptacle while pressing the TUNER key.

How to use

During the operation in step 1), all the FL and LED indicators go on and the DOLBY and PRESENCE indicator lamps go on as indicated below.

DOLBY ↔ PRESENCE

During the operation in step 2), data is initialized and the power is switched off (factory setting).

Press the DOLBY or PRESENCE key after the Test 1 mode operation is completed. The display returns to normal. Press the PRESENCE +/- KEY for a), CENTER + key for b), REAR + key for c), CENTER + key for d), DELAY + key for e), SEAT POSITION FRONT key for f), and VISUAL FIX key for g). The following operation is performed.

a) MASTER VOLUME

VOLUME UP, STOP, and DOWN are assigned to the following keys to perform the following operations:

PRESENCE + key: VOLUME UP = Increases continuously (UP).

PRESENCE +/- key: VOLUME STOP = Stops UP/DOWN during volume control operation

PRESENCE - key: VOLUME DOWN = Decreases continuously (DOWN)

b) CENTER VOLUME

Use the CENTER + key during DOLBY.

(-15 dB) → -∞ dB → -40 dB → -0 dB
 ↑ _____ ↓

Ineffective during PRESENCE.

c) REAR VOLUME

DOLBY (prologic)

(-15 dB) → -∞ dB → -40 dB → -0 dB
 ↑ _____ ↓

The same as during PRESENCE (when the rear speaker is on).

d) PRESENCE VOLUME

Ineffective during DOLBY.

Use the CENTER + key during PRESENCE.

(-8 dB) → -20 dB → -10 dB → -0 dB
 ↑ _____ ↓

e) DELAY TIME

The delay time changes from 15 to 30 ms in 1 ms units during DOLBY.

The delay time changes from 5 to 100 ms in 5 ms units during PRESENCE.

f) SEAT POSITION

Ineffective during DOLBY.

PRESENCE

REAR -12 → CENTER 0 → FRONT +12
 ↑ _____ ↓

g) DOLBY TEST TONE

Use the VISUAL FIX key.

Press the key to enter the test tone mode during DOLBY. The mode is selected about every 2 seconds. Press the key again. The mode is then selected every second. The test tone mode is terminated when the key is pressed again. PROLOGIC (NORMAL WIDE)

LEFT → CENTER → RIGHT → REAR
 ↑ _____ ↓

PROLOGIC (PHANTOM)

LEFT → RIGHT → REAR

↑ _____ ↓

3 STEREO

LEFT → CENTER → RIGHT

↑ _____ ↓

Note: The through mode is entered in the PRESENCE of ARENA only.

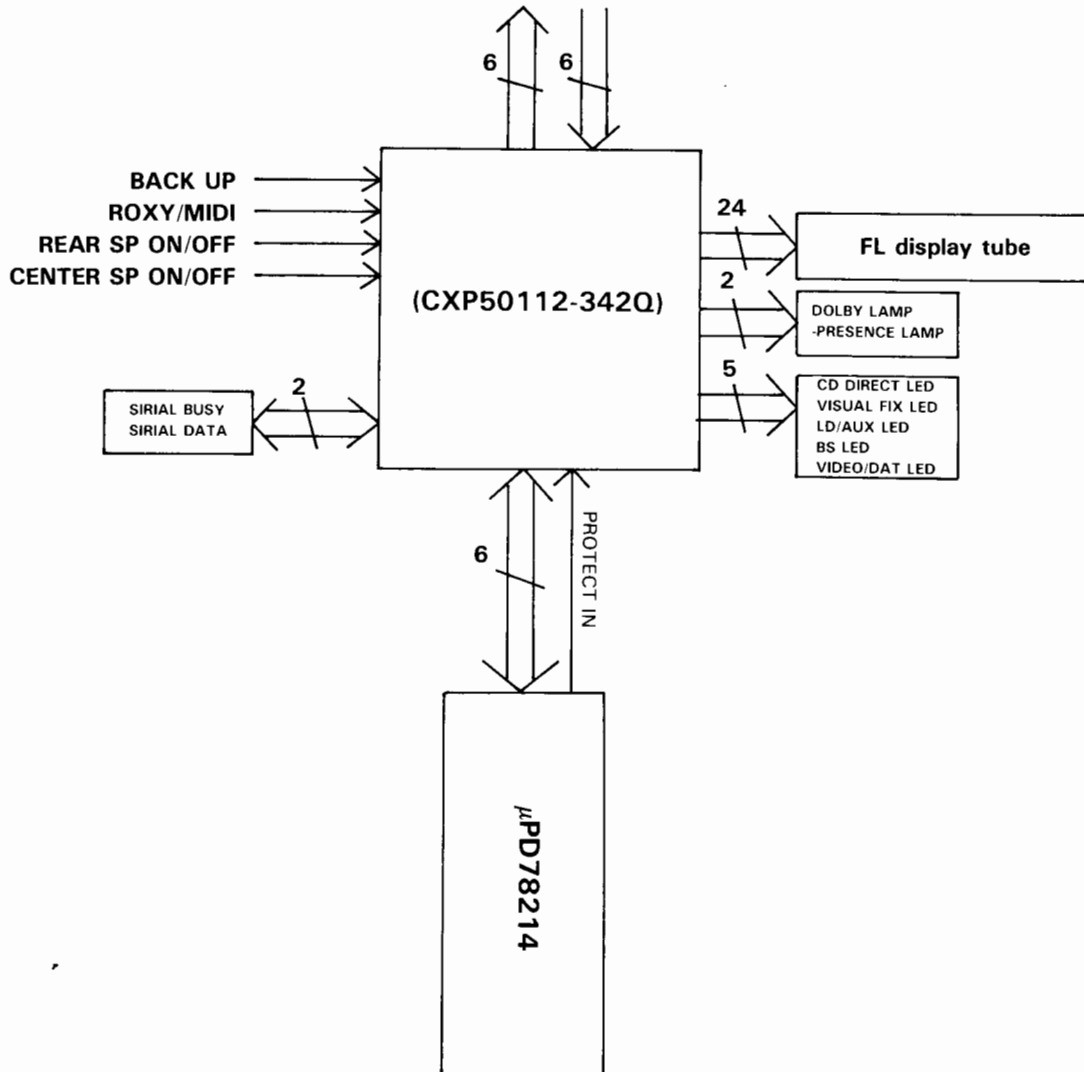
CIRCUIT DESCRIPTION

Microprocessor

Block diagram of microcomputer's peripheral equipment

SCAN 5	OFF	PRESENCE	3STEREO	CD DIRECT	MUTE	CENTER MODE
SCAN 4	HIT MASTER	POWER	MELODY ASSIST	JAZZ CLUB	NB CIRCUIT	ARENA
SCAN 3	DISCO	LD/AUX	VISUAL FIX	STADIUM	BS	DISPLAY
SCAN 2	CHURCH	VIDEO DAT	TAPE A	MOVIE	SEAT-P FRONT	SEAT-P REAR
SCAN 1	DELAY DOWN	TAPE B	TUNER	REAR UP	DELAY UP	REAR DOWN
SCAN 0	PHONO	P-VOL. UP	CENTER UP	CD	P-VOL. DOWN	CENTER DOWN

RETURN 0 RETURN 1 RETURN 2 RETURN 3 RETURN 4 RETURN 5



CIRCUIT DESCRIPTION

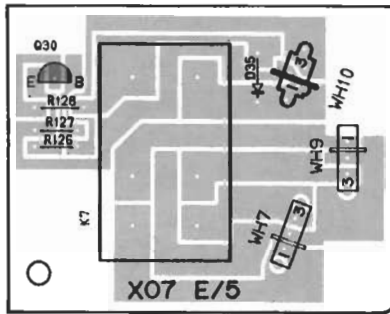
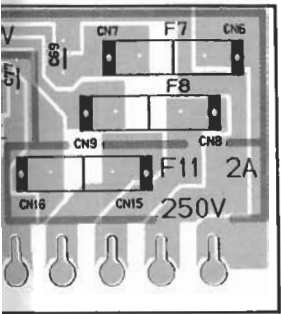
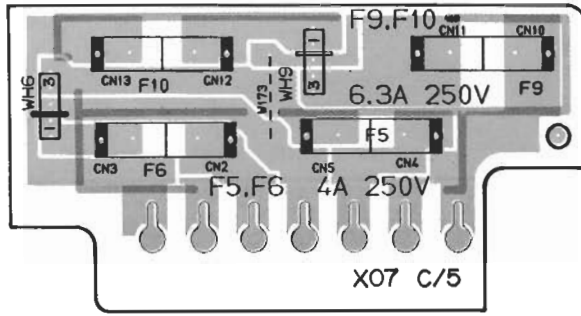
Pin Functions

Pin No.	Pin name	I/O	Name	Description
1	S4/PG0	O	SCAN 4	Key scan 4
2	S5/PG1	O	SCAN 5	Key scan 5
3	S6/PG2	—	NC (OPEN)	
4	S7/PG3	—	NC (OPEN)	
5	S8/PK0	O	FL SEGMENT (g)	FL segment (g)
6	S9/PK1	O	FL SEGMENT (f)	FL segment (f)
7	S10/PK2	O	FL SEGMENT (b)	FL segment (b)
8	S11/PK3	O	FL SEGMENT (k)	FL segment (k)
9	S12/PJ0	O	FL SEGMENT (i)	FL segment (i)
10	S13/PJ1	O	FL SEGMENT (j)	FL segment (j)
11	S14/PJ2	O	FL SEGMENT (a)	FL segment (a)
12	S15/PJ3	O	FL SEGMENT (h)	FL segment (h)
13	S16/T15	O	FL SEGMENT (c)	FL segment (c)
14	S17/T14	O	FL SEGMENT (e)	FL segment (e)
15	S18/T13	O	FL SEGMENT (n)	FL segment (n)
16	S19/T12	O	FL SEGMENT (l)	FL segment (l)
17	S20/T11	O	FL SEGMENT (m)	FL segment (m)
18	S21/T10	O	FL SEGMENT (d)	FL segment (d)
19	S22/T9	O	FL GRID (1G)	FL grid (1G)
20	S23/T8	O	FL GRID (2G)	FL grid (2G)
21	T7	O	FL GRID (3G)	FL grid (3G)
22	T6	O	FL GRID (4G)	FL grid (4G)
23	T5	O	FL GRID (5G)	FL grid (5G)
24	T4	O	FL GRID (6G)	FL grid (6G)
25	T3	O	FL GRID (7G)	FL grid (7G)
26	T2	O	FL GRID (8G)	FL grid (8G)
27	T1	O	FL GRID (9G)	FL grid (9G)
28	T0	O	FL GRID (10G)	FL grid (10G)
29	INT	I	NC (GND)	External interrupt (unused)
30	TX	—	NC (OPEN)	32 kHz T/C clock output (unused)
31	TEX	I	NC (GND)	32 kHz T/C clock input (unused)
32	RST	I/O		Microcomputer reset
33	NC	—		
34	VDD	—		Positive power supply
35	PI0/AD0	I	CENTER SP ON/OFF	Center speaker ON/OFF input
36	PI1/AD1	I	REAR SP ON/OFF	Rear speaker ON/OFF input
37	PI2/AD2	—	NC (GND)	
38	PI3/AD3	—	NC (GND)	
39	PB0/AD4	I/O	SERIAL (BUSY)	Serial BUSY line
40	PB1/AD5	I/O	SERIAL (DATA)	Serial DATA line
41	PB2/AD6	O	NB CIRCUIT ON/OFF	NB circuit ON/OFF output
42	PB3/AD7	I	PROTECT IN	Protection input
43	EC	—	NC (GND)	
44	PX0/SC	O	SIO CLOCK	SIO CLOCK (for communication)
45	PX1/SO	O	SIO DATA	SIO DATA (for communication)
46	PX2/SI	—	NC (GND)	

CIRCUIT DESCRIPTION

Pin No.	Pin name	I/O	Name	Description
47	PA0	O	SERIAL (START)	Serial START (for communication)
48	PA1	O	SERIAL (REQUEST)	Serial REQUEST (for communication)
49	PA2	O	SERIAL (RESET)	Serial RESET (for communication)
50	PA3	I	SERIAL (READY)	Serial READY (for communication)
51	PF0	I	VIDEO/DAT (LED)	LED
52	PF1	I	BS (LED)	LED
53	PF2	I	LD/AUX (LED)	LED
54	PF3	I	VISUAL FIX (LED)	LED
55	PE0	I	NC (OPEN)	
56	PE1	I	DOLBY (LED)	LAMP
57	PE2	I	RPESENCE (LED)	LAMP
58	PE3	I	CD DIRECT (LED)	LAMP
59	PY0	I	NC (OPEN)	
60	PY1/PWM	I	NC (OPEN)	
61	PY2/WP	I	BACK UP	Backup input
62	PY3/RMC	I	REMOCON	Remote control input
63	PDO	I	ROXY/MIDI	Type discrimination input
64	PD1	I	RETURN0	Key return 0
65	PD2	I	RETURN1	Key return 1
66	PD3	I	RETURN2	Key return 2
67	PC0	I	RETURN3	Key return 3
68	PC1	I	RETURN4	Key return 4
69	PC2	I	RETURN5	Key return 5
70	PC3	I	NC (OPEN)	
71	Vss	—		GND pin
72	XTAL	—		Clock output
73	CN	—	NC (OPEN)	
74	EXTAL	I		Clock input
75	VREF	—		Reference voltage pin for voltage detection (unused)
76	VFDP	—		FL load power supply pin
77	S0/PH0	O	SCAN0	Key scan 0
78	S1/PH1	O	SCAN1	Key scan 1
79	S2/PH2	O	SCAN2	Key scan 2
80	S3/PH3	O	SCAN3	Key scan 3

PHONES



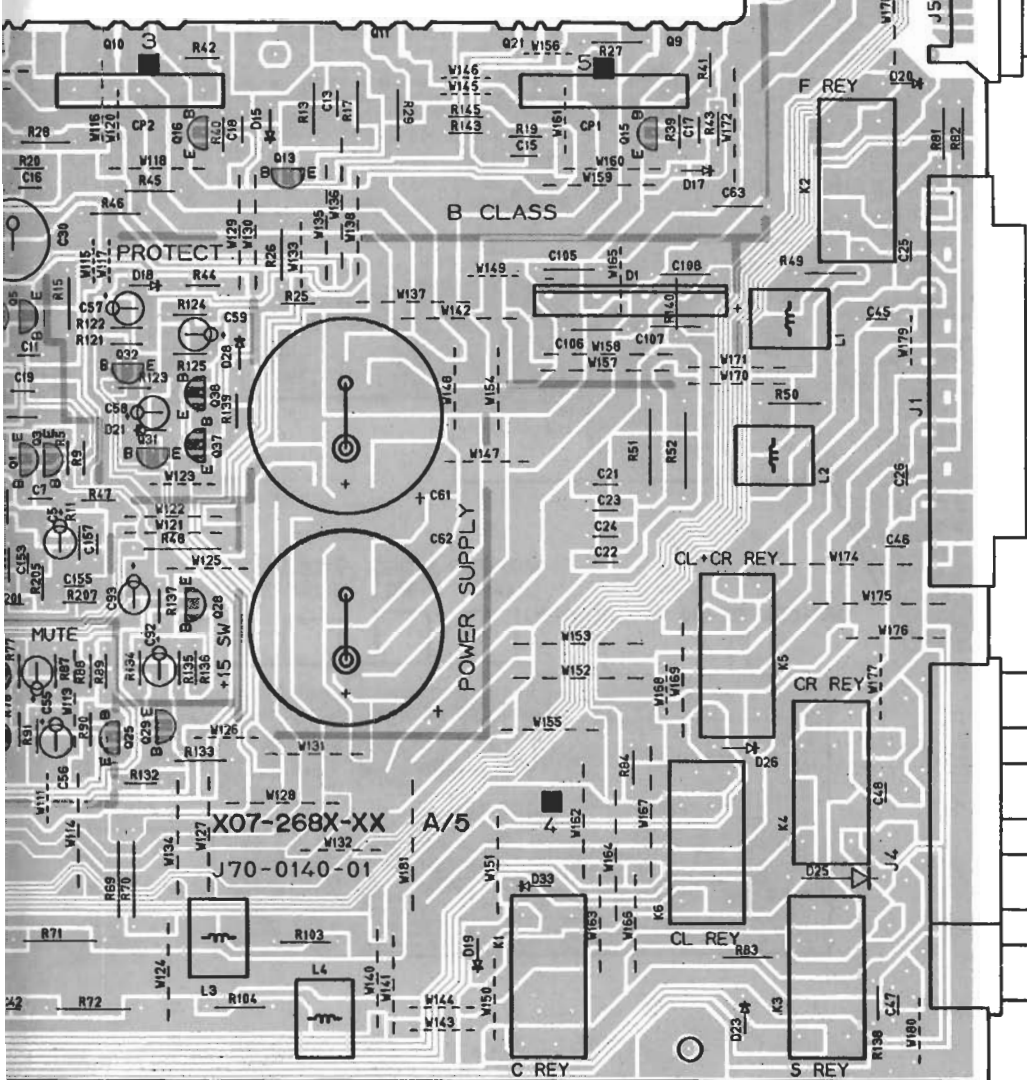
POWER SUPPLY FOR SYSTEM

FRONT SP
CENTER SP

SURROUND SP

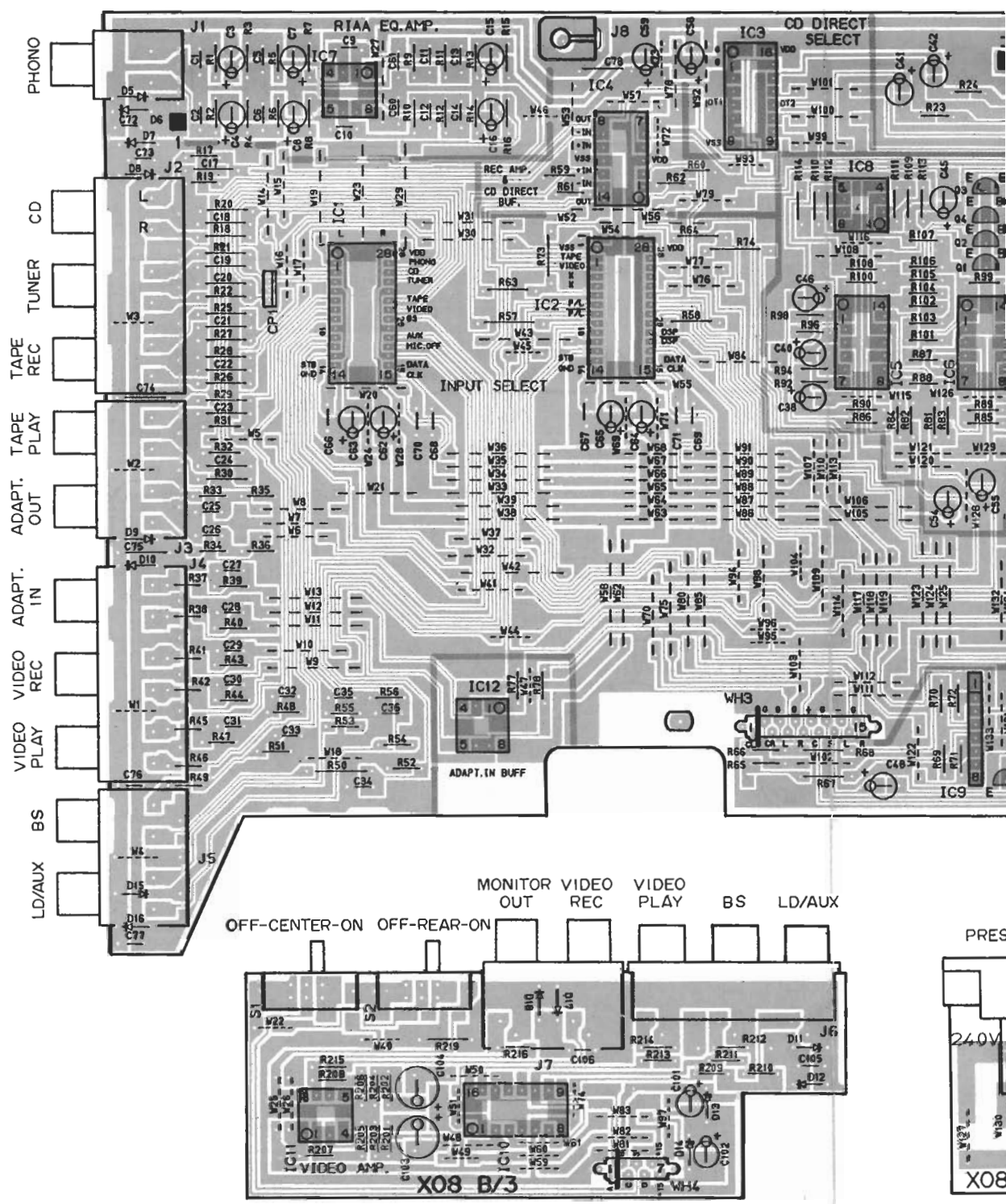
SUPER WOOFER PREOUT

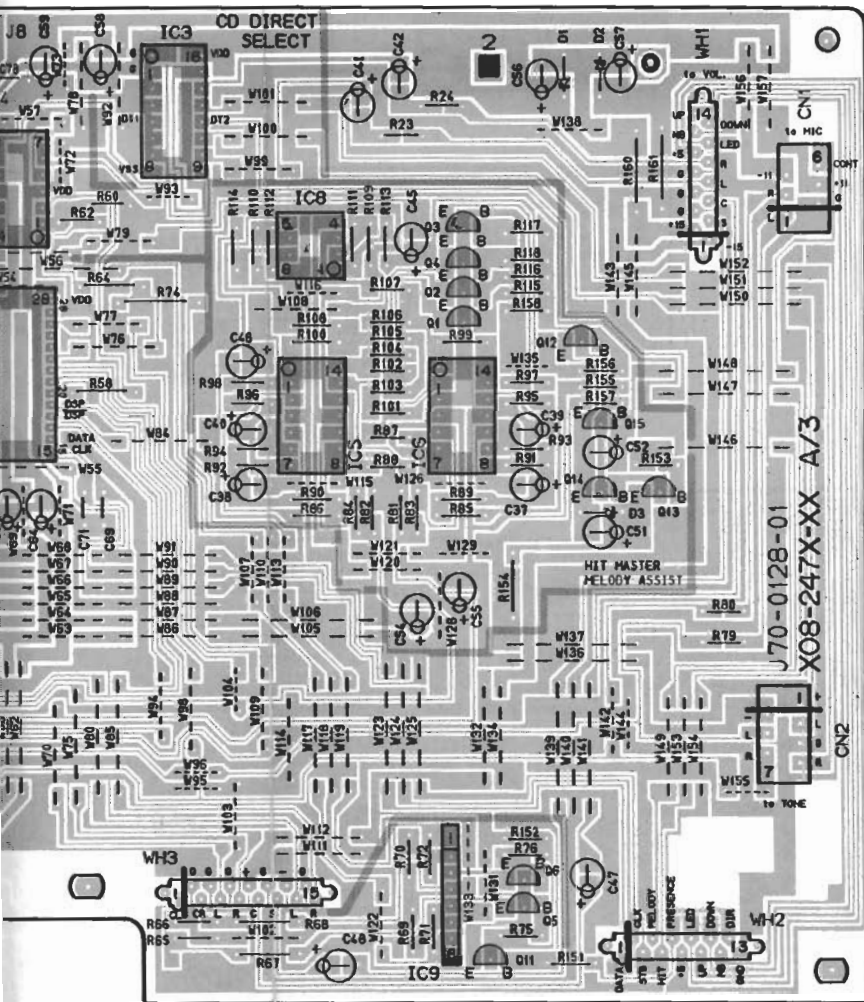
CENTER SP



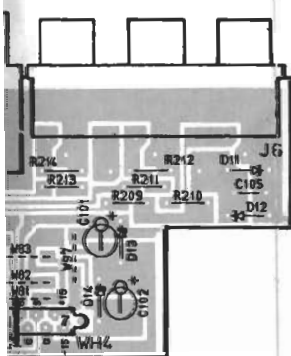
Refer to the schematic diagram for the values of resistors and capacitors.

PRE AMPLIFIER UNIT

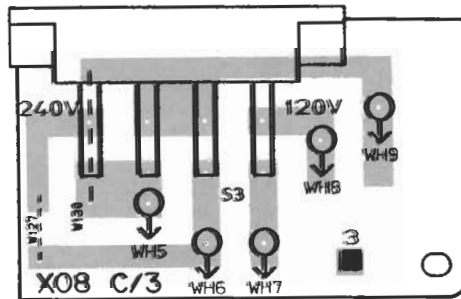




VIDEO PLAY BS LD/AUX

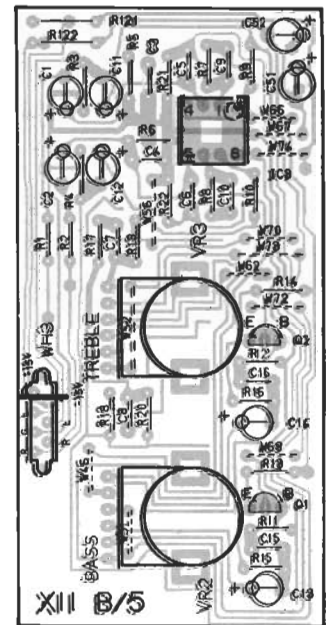
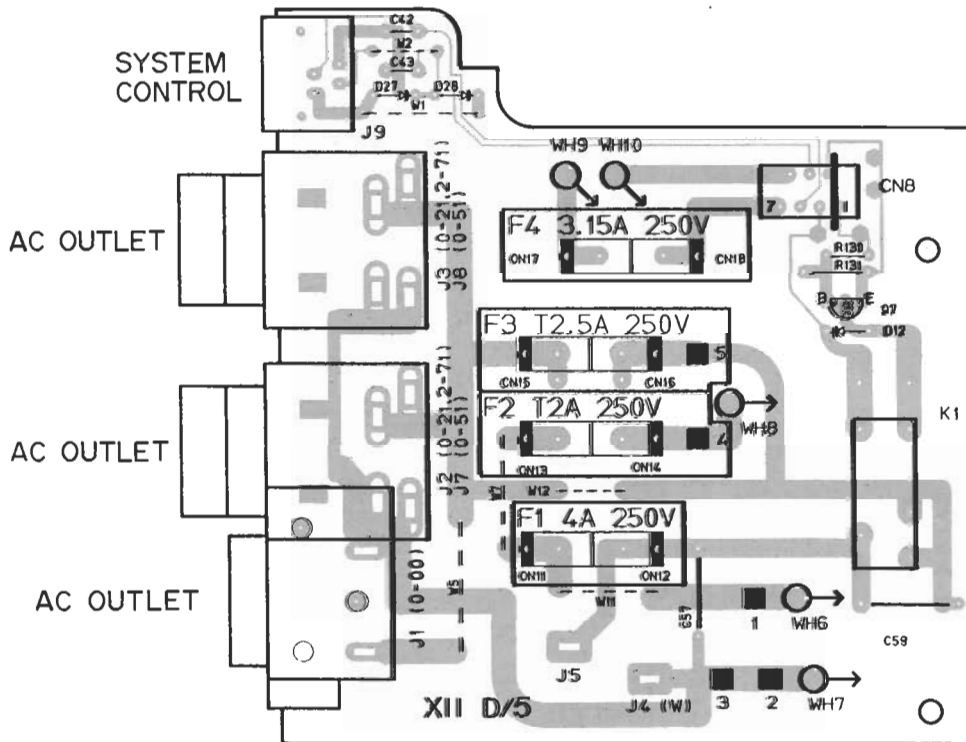
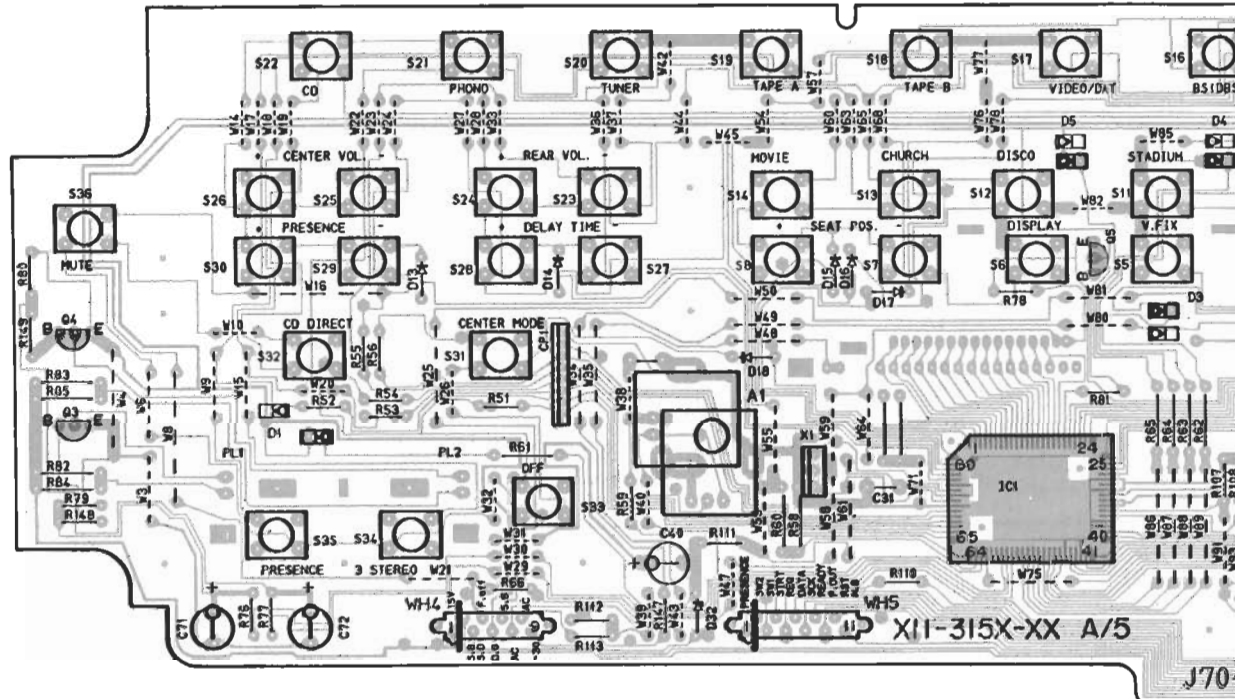


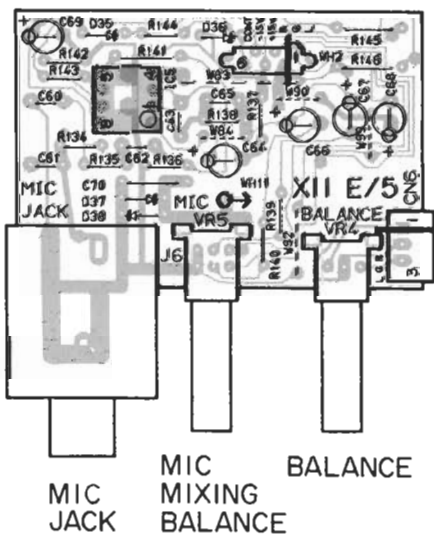
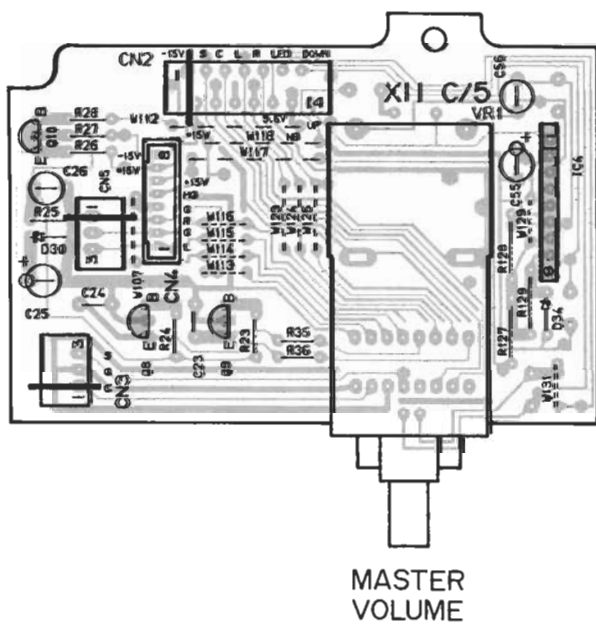
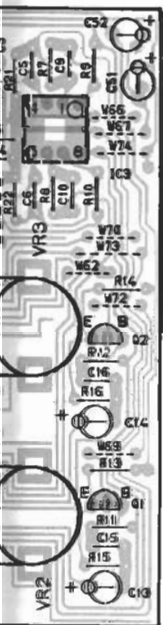
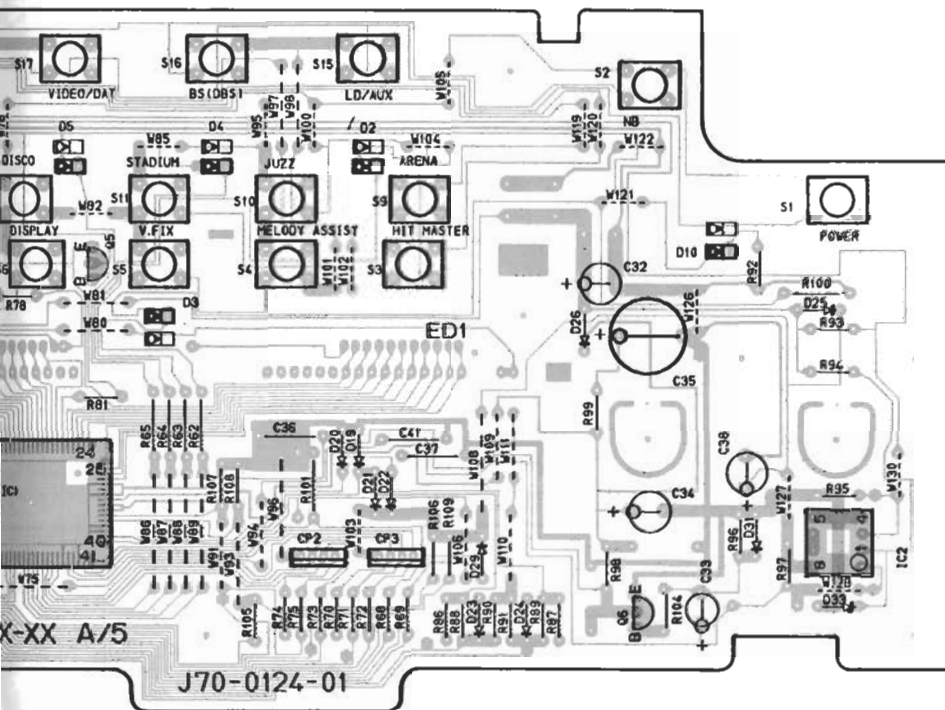
PRESENCE REC AMP



PC BOARD (Component Side View)

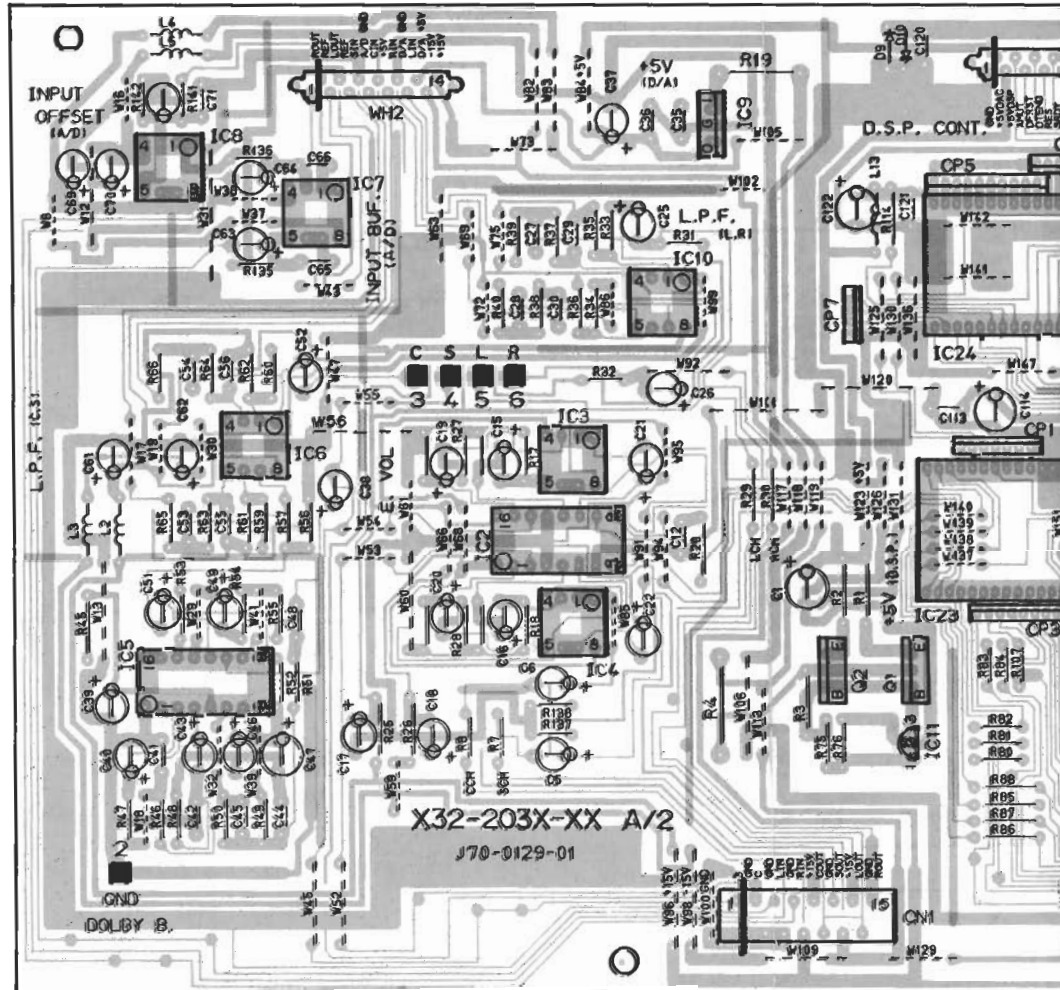
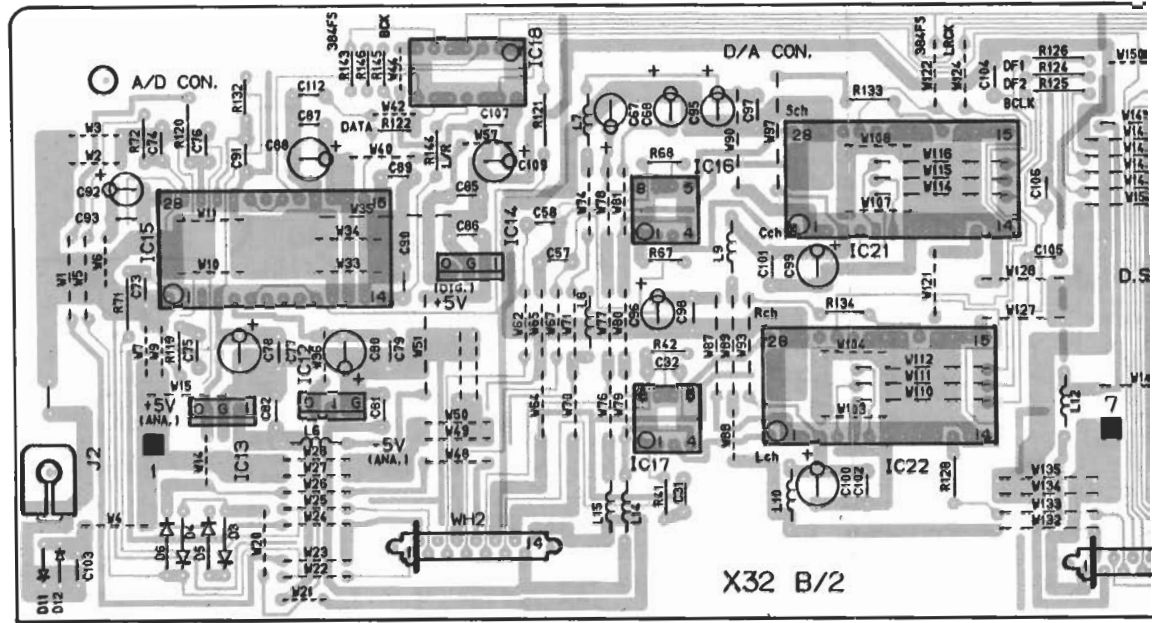
CONTROL UNIT

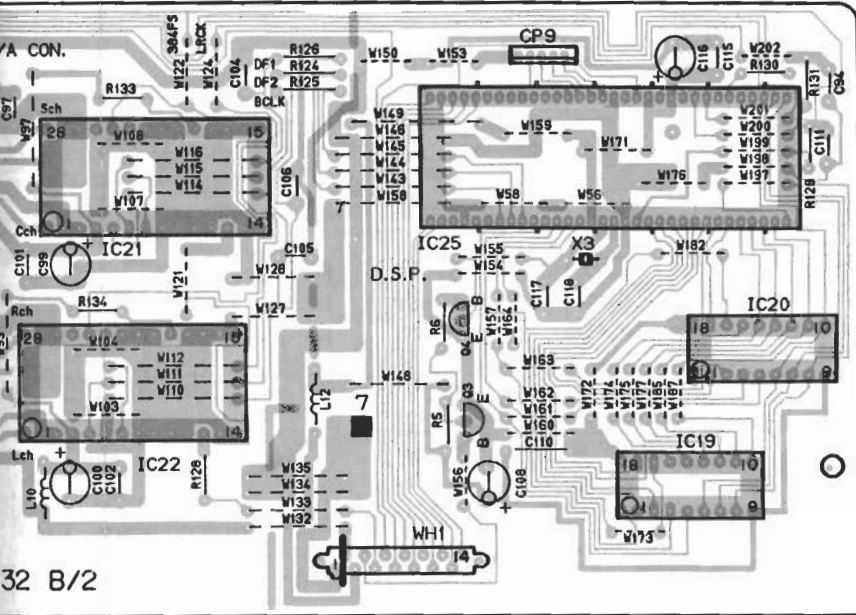




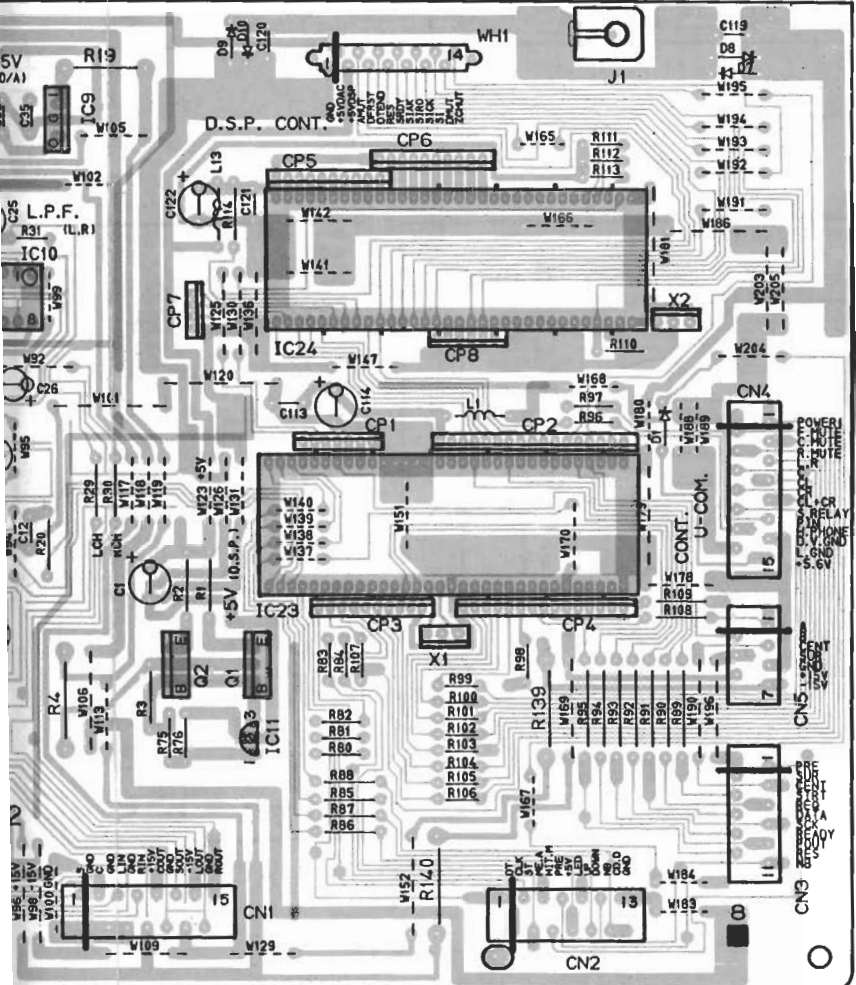
Refer to the schematic diagram for the values of resistors and capacitors.

SIGNAL PROCESSOR UNIT

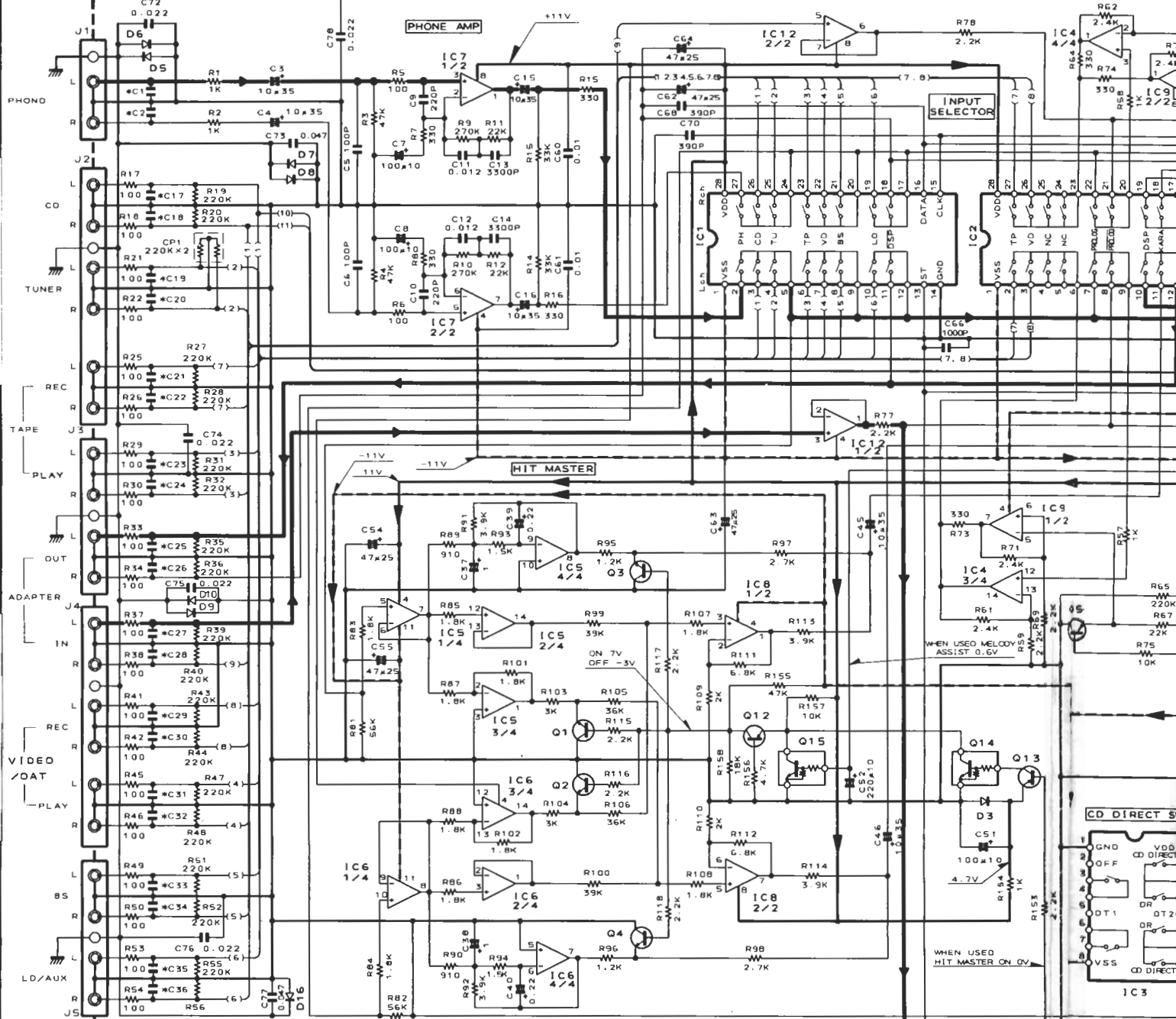




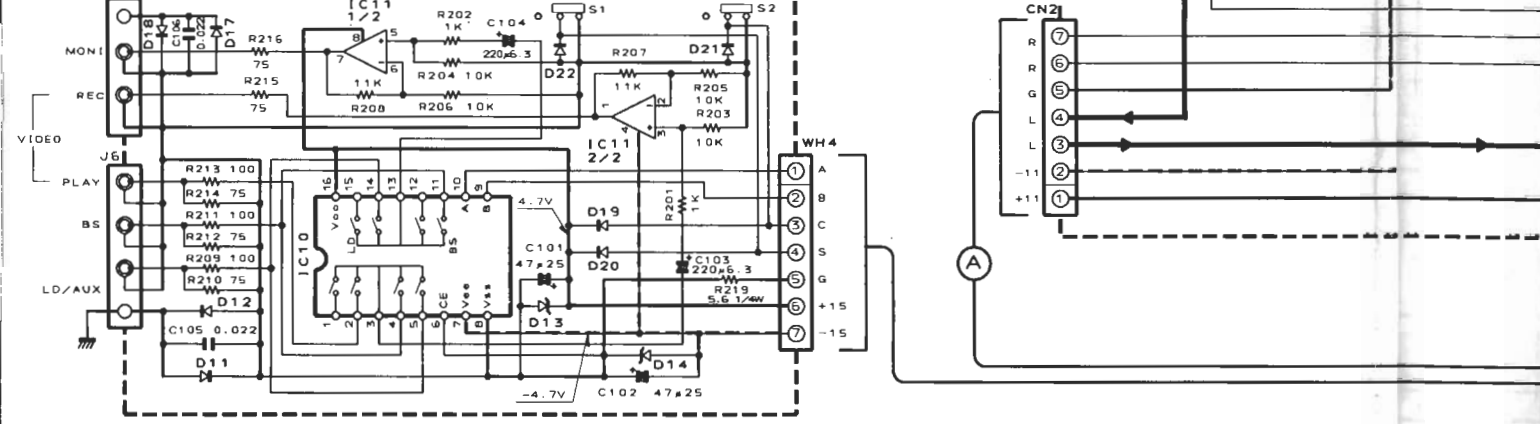
32 B/2



X08-247X-XX A/3

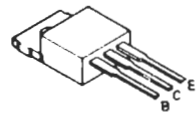
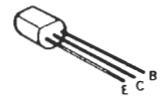


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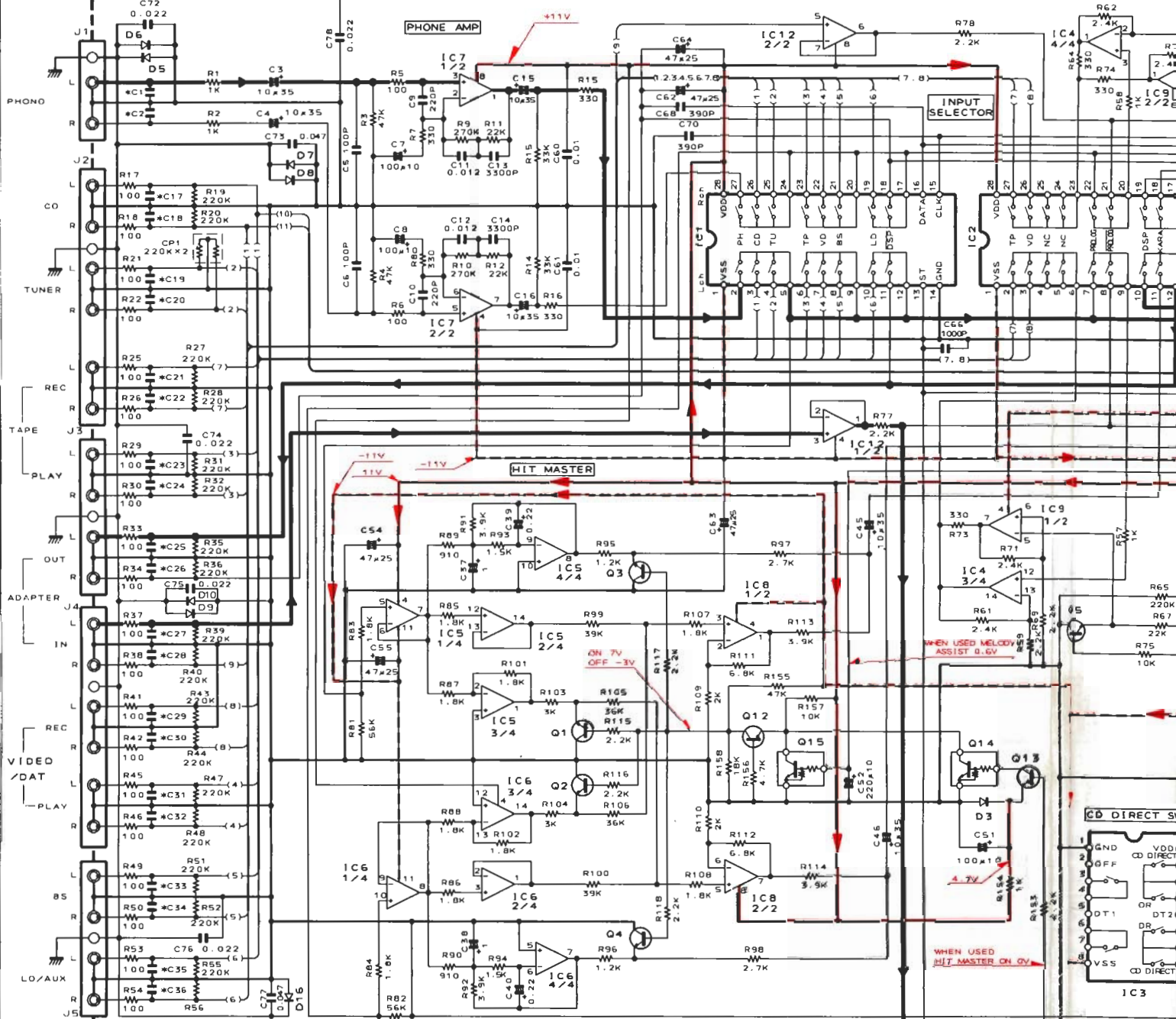


- 2SA1123
- 2SA733 (A)
- 2SA992
- 2SC1845
- 2SC1923
- 2SC2003
- 2SC2878
- 2SC945 (A)

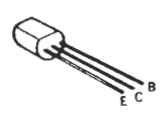
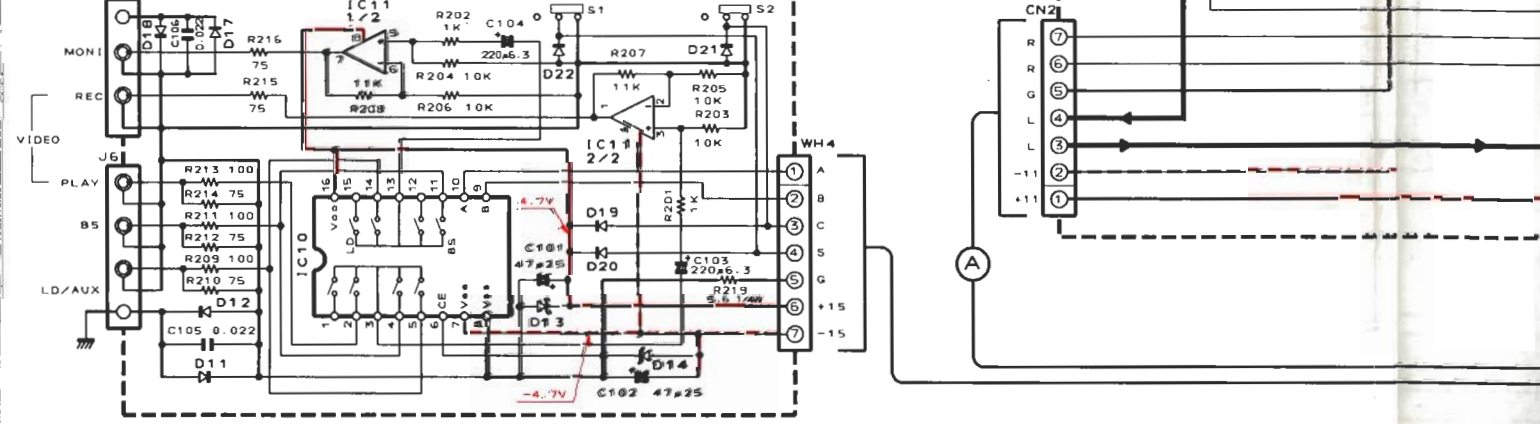
2SD1266



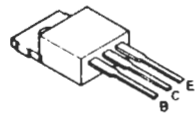
X08-247X-XX A/3



X08-B/3

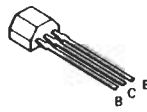
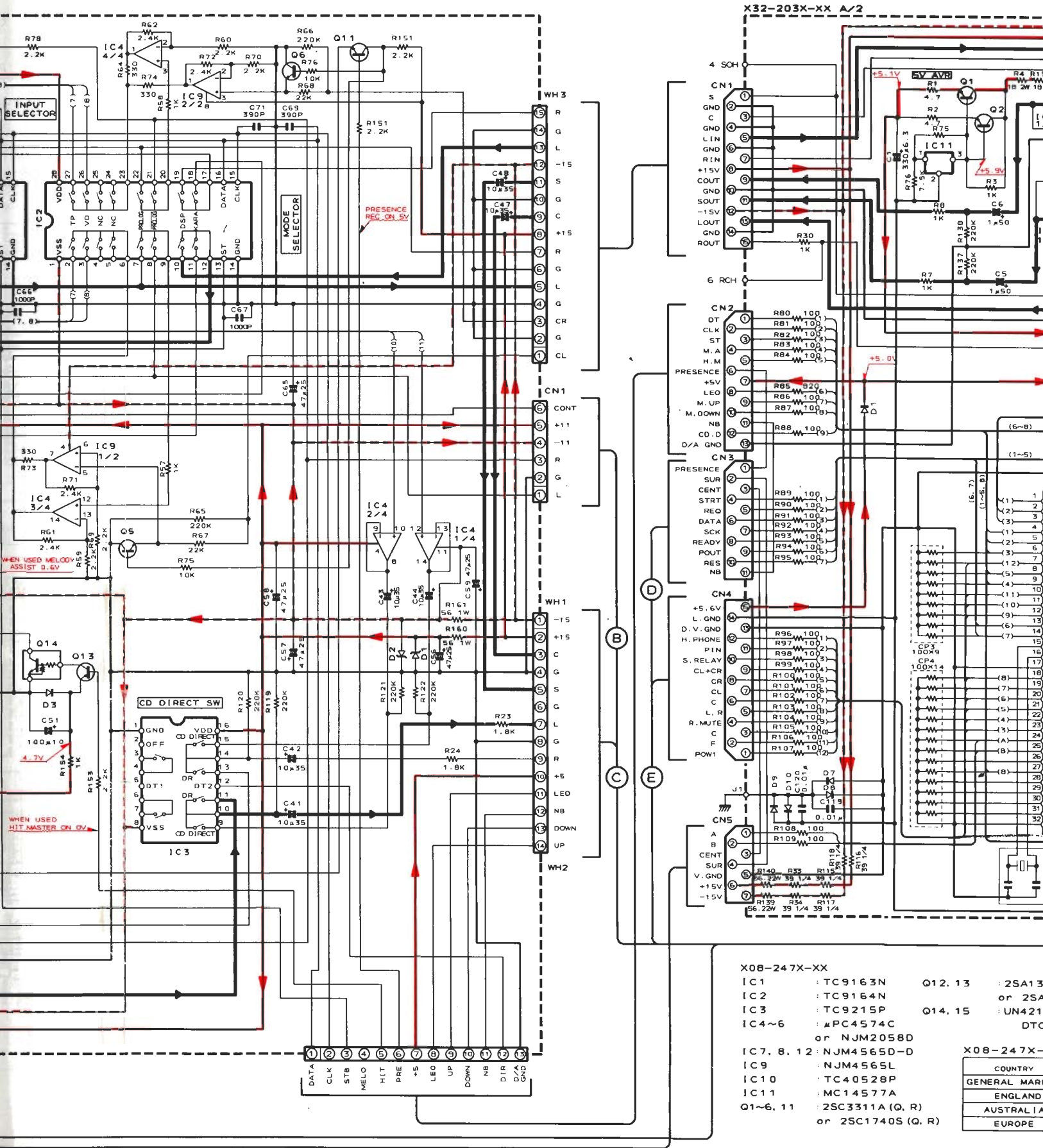


- 2SA1123
- 2SA733 (A)
- 2SA992
- 2SC1845
- 2SC1923
- 2SC2003
- 2SC2878
- 2SC945 (A)



2SD1266





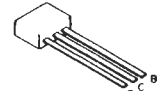
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2SC1740S



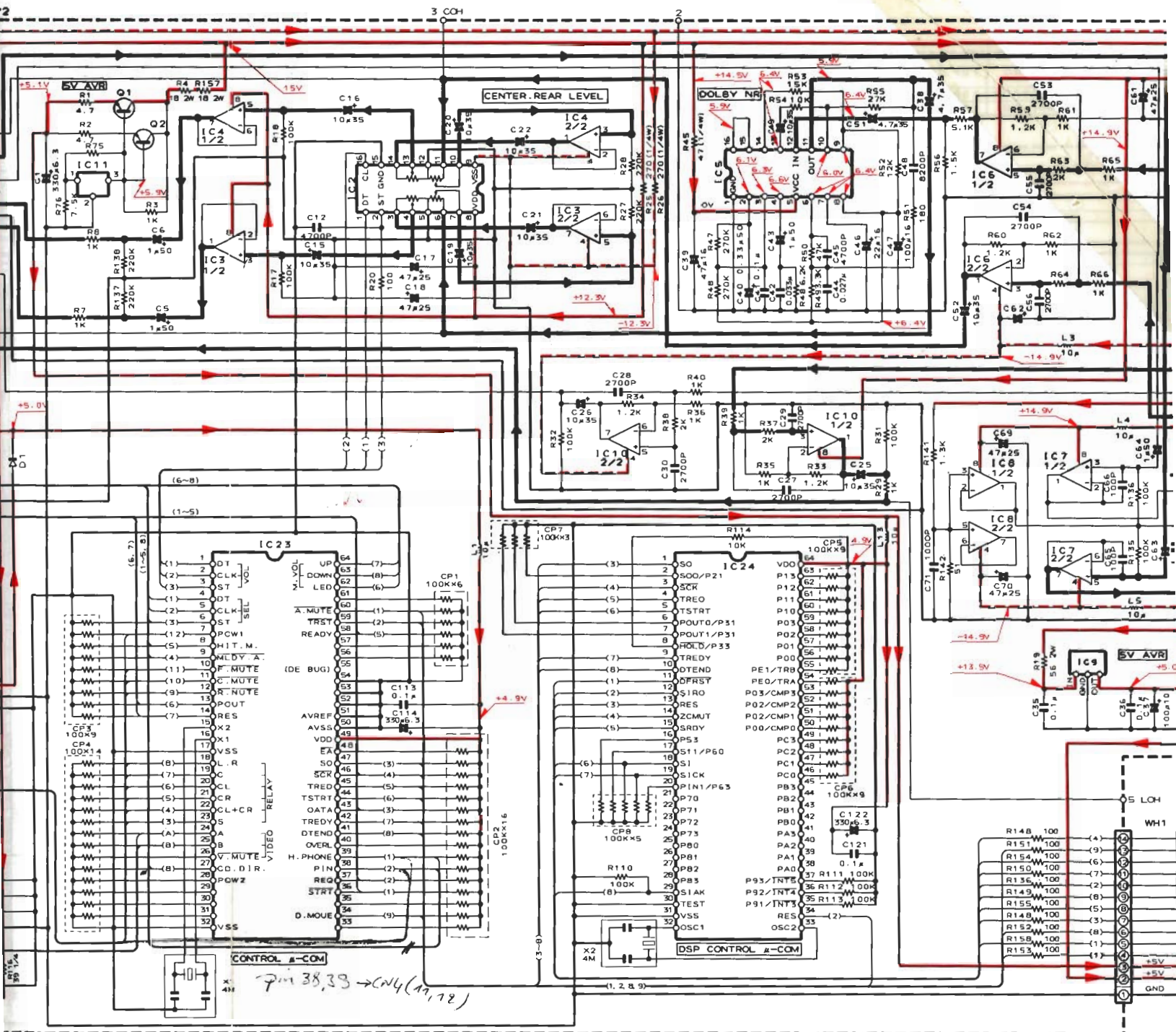
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2SB941

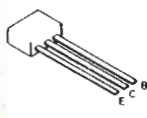


UN421
2SA13
2SC3311

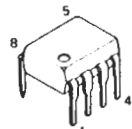


163N	Q12, 13	: 2SA1309A (Q, R) or 2SA9235 (Q, R)	D1, 2	: RD11ES (B2) or HZS11N (B2)	X32-203X-XX	IC3, 4,		IC19, 20	: LM33464G-12 or HM50464RP-12
215P	Q14, 15	: UN4212 or DTC124ES	D3, 13, 14	: RD4.7ES (B) or HZS4.7N (B)		5, 10	: NJM4565D-D	IC21, 22	: LC7883K
4574C			D5-12	: 1SS133 or HSS104		IC2	: TC9213P	IC23	: UPD78214CW-770
JM2058D						IC5	: LA2730	IC24	: LC66516B-4733
4565D-D						IC7, 8	: UPC4072C	IC25	: LC83010N
4565L						IC11	: TL431CLP or NJM431L	Q1, 2	: 2SD1266
0528P						IC12	: UPC7905HF	Q3	: UN4212 or DTC124ES
4577A						IC9, 13, 14	: UPC7805HF	Q4	: 2SC1923 (R, O)
311A (Q, R)						IC15	: CS5339-KP	Q5	: 2SA1309A (Q, R) or 2SA9235 (Q, R)
IC1740S (Q, R)						IC16, 17	: NJM4558D	D1, 3-10	: 1SS133 or HSS104
						IC18	: UPD74HC08C or HM50464RP-12		

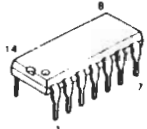
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ENGLAND	T				
AUSTRALIA	X		2-71	NO	220P
EUROPE	E				



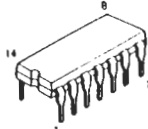
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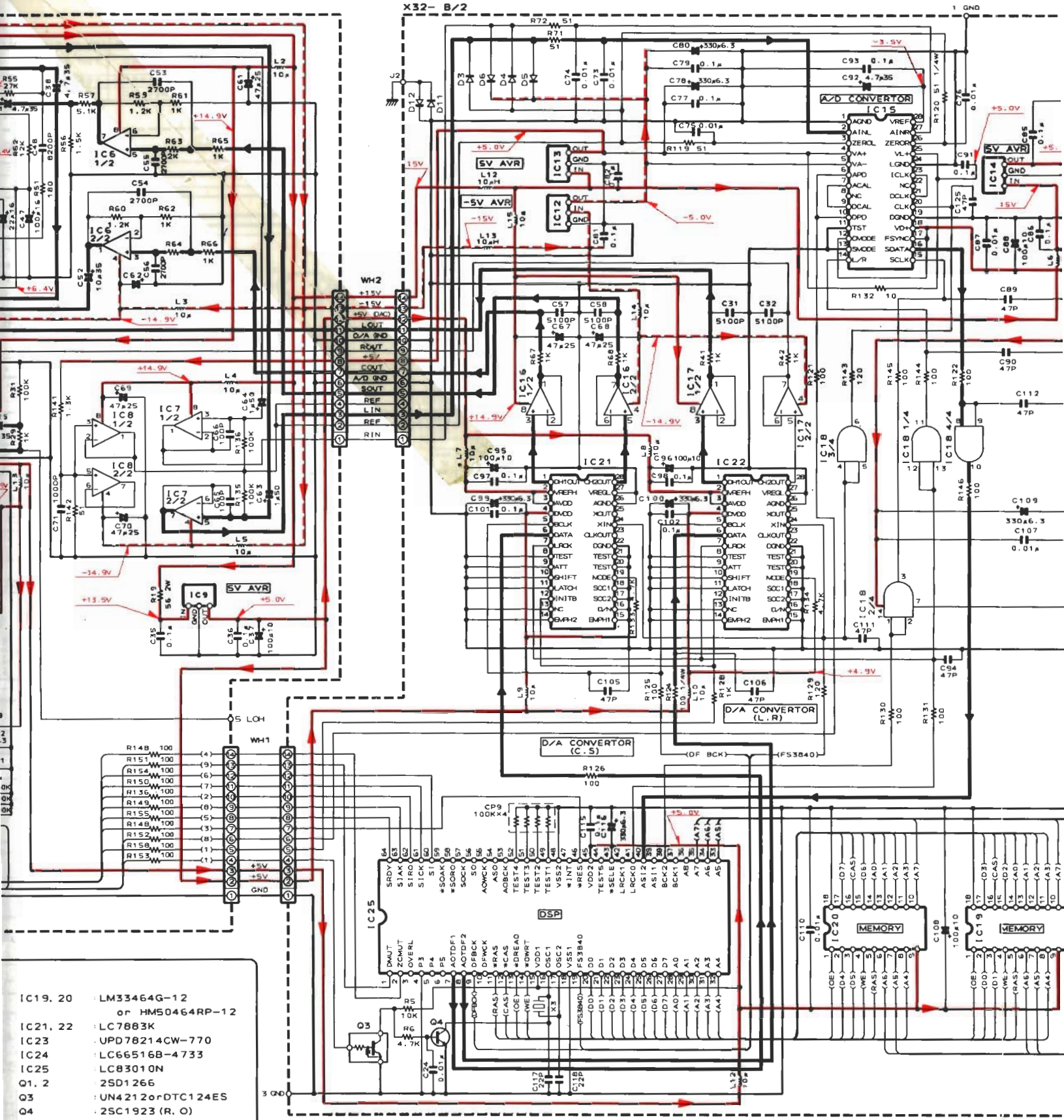
NJM4558D
NJM4565D-D



NJM2058D



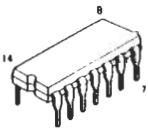
UPC4
UPD7



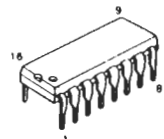
- IC19, 20 : LM33464G-12
or HM50464RP-12
- IC21, 22 : LC7883K
- IC23 : UPD78214CW-770
- IC24 : LC66516B-4733
- IC25 : LC83010N
- Q1, 2 : 2SD1266
- Q3 : UN42120 or DTC124ES
- Q4 : 2SC1923 (R, O)
- Q5 : 2SA1309A (Q, R)
or 2SA9335 (Q, R)
- D1, 3-10 : 1SS133 or HSS104

— SIGNAL LINE
 - - - GND LINE
 — +B LINE
 - - - -B LINE

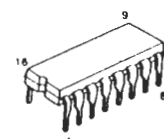
058D



UPC4574C
 UPD74HC08C



LA2730

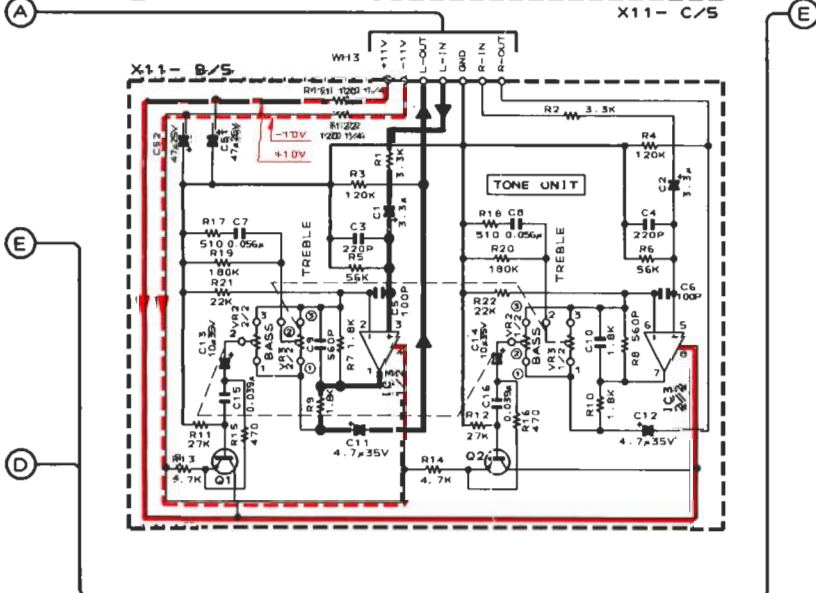
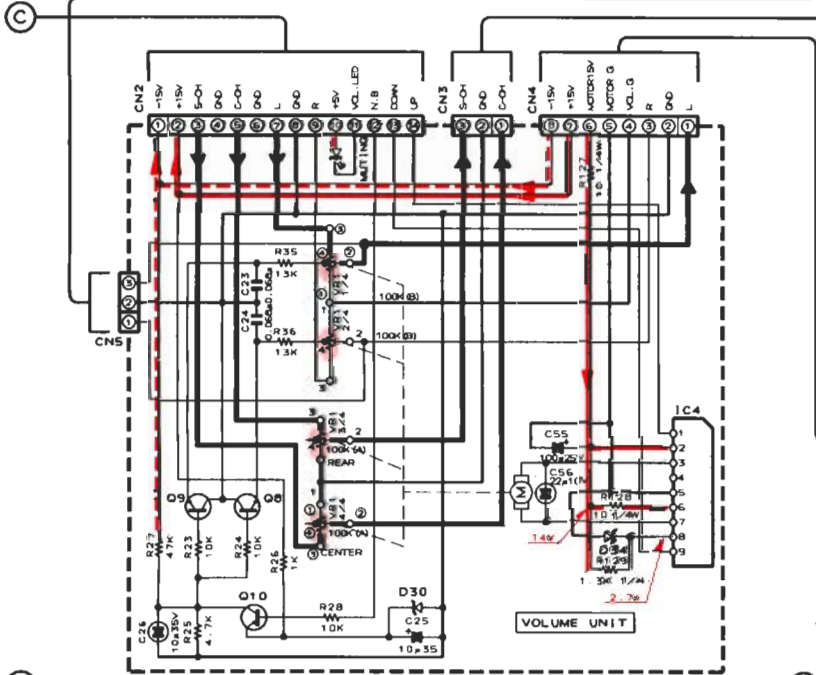
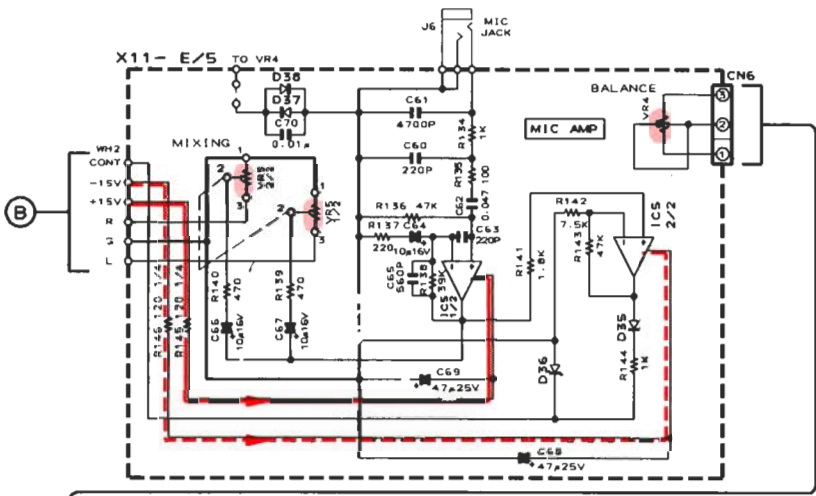
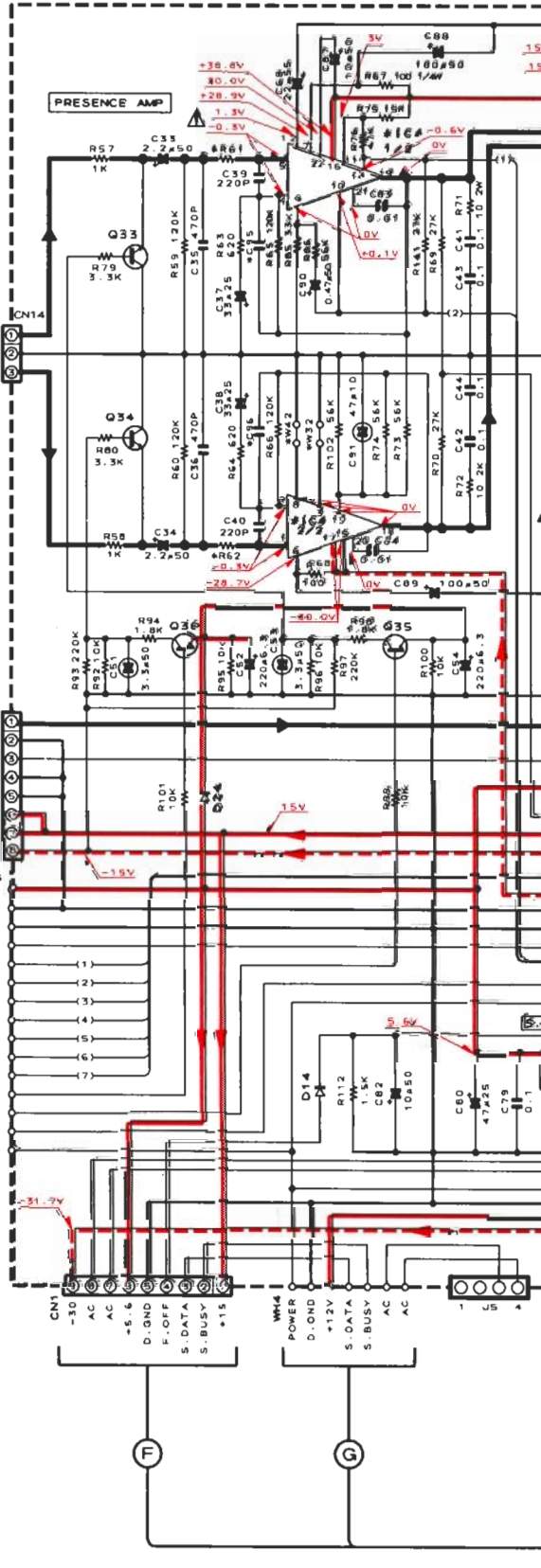


TC4052BP
 TC9213P
 TC9215P

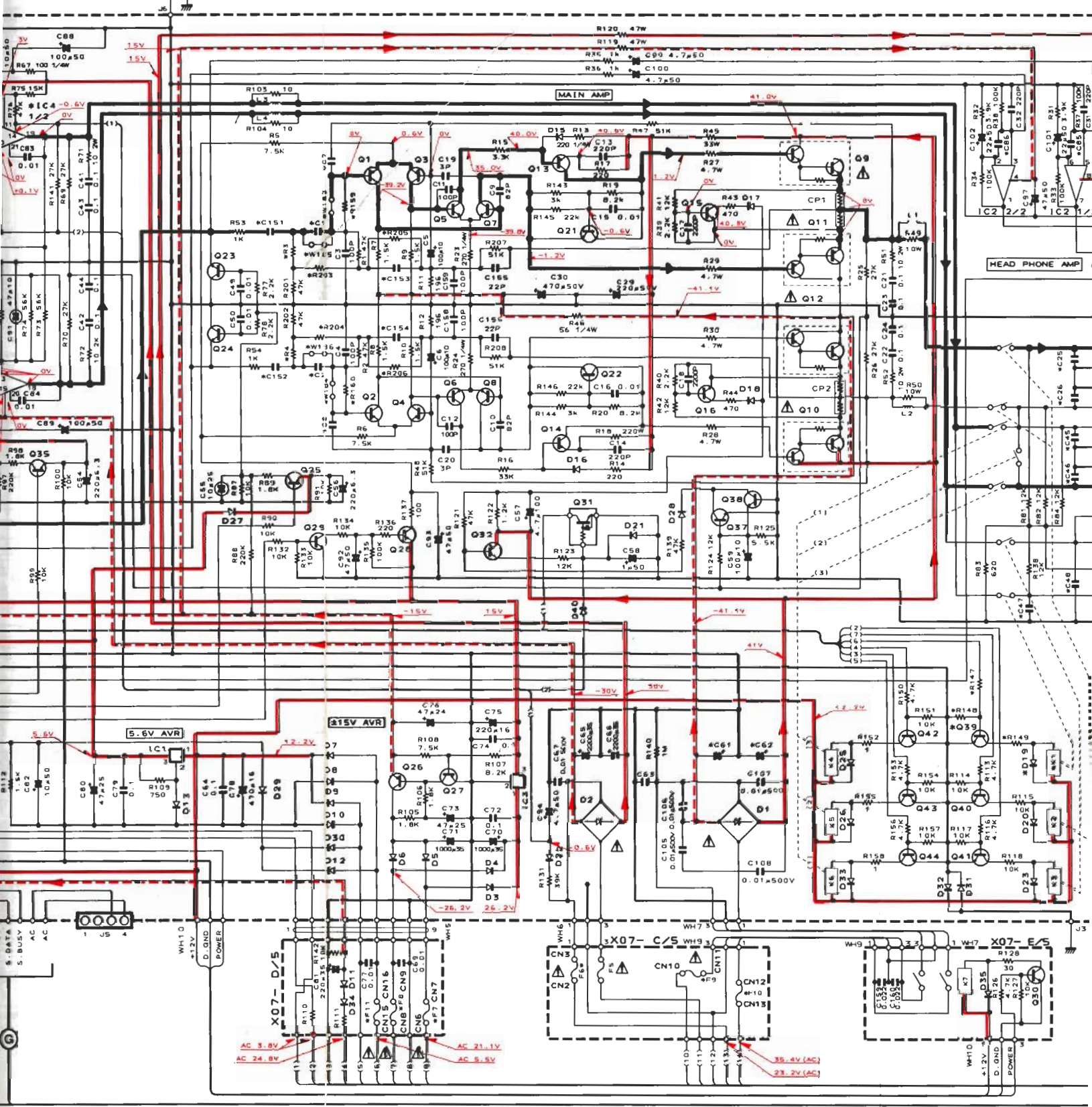
X07-268X-XX

COUNTRY	ABB	UNIT NAME	REP. NO	R3, 4	R61, 62	R203, 204	R205, 206
GENERAL MARKET	M			10K	1K	1.5K	1.2
AUSTRALIA	X	0-21					
EUROPE	E	2-71	NO	2.7K	6.2K	NO	
ENGLAND	T	0-51	NO	1K	6.2K	NO	

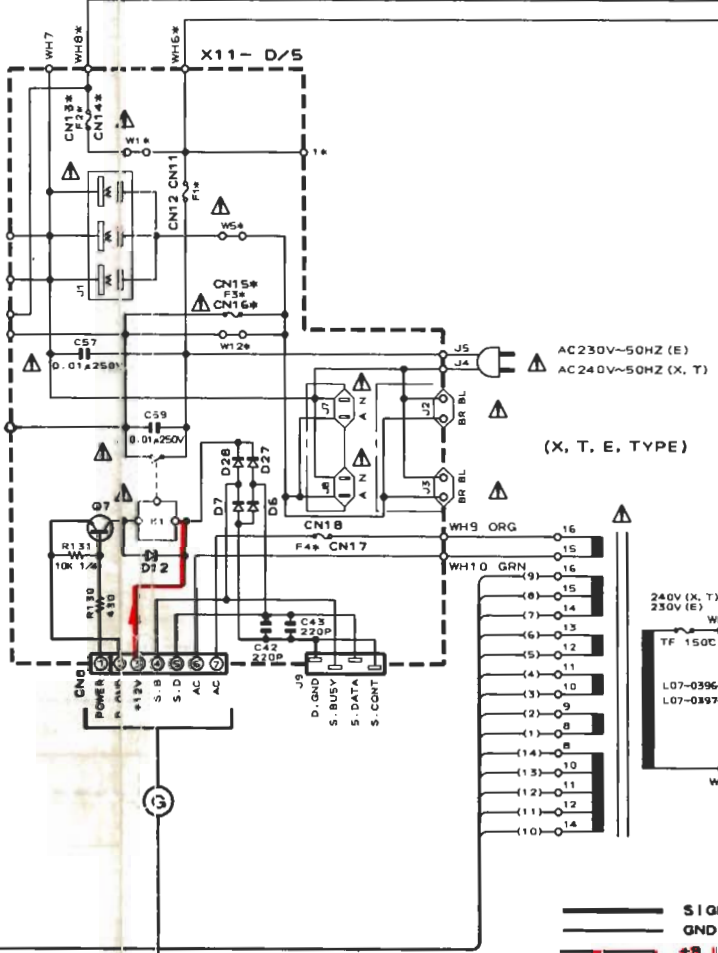
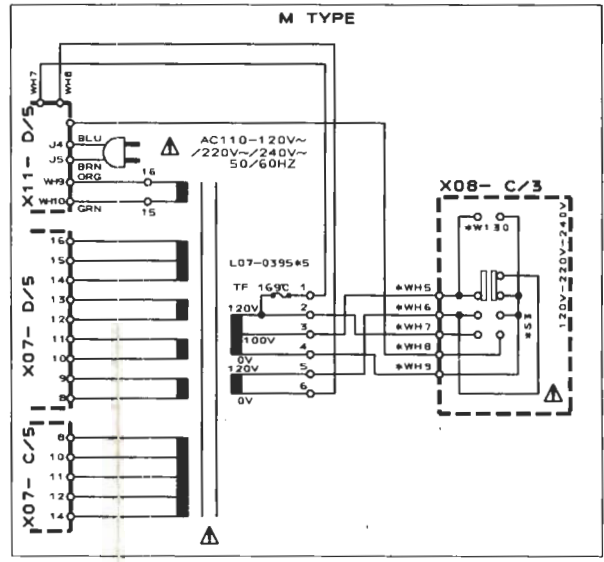
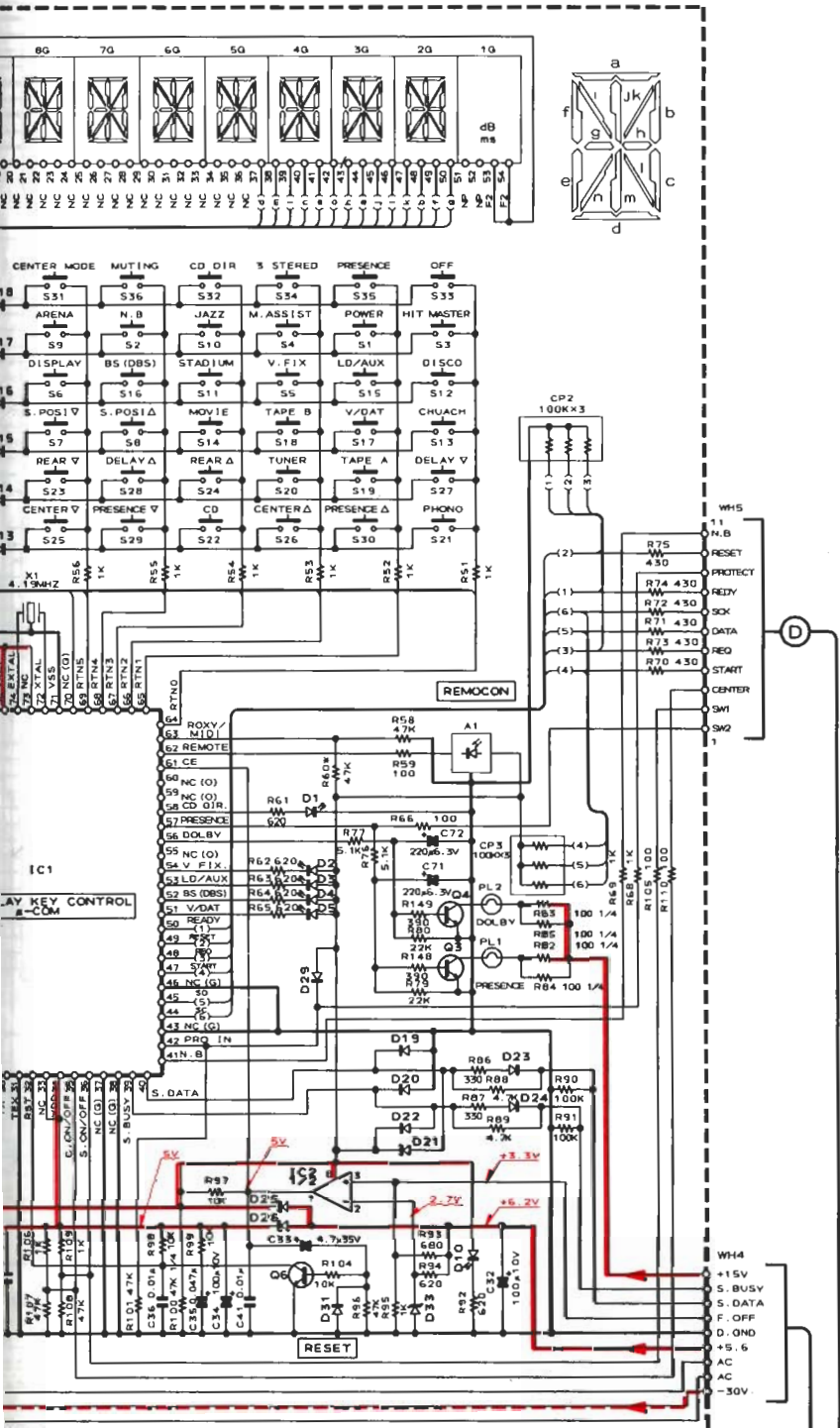
X07-268X-XX A/S



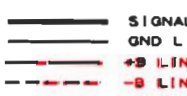
R51. 62	R203, 204	R205, 206	R159, 160	R147	R148	R149	C1. 2	C7. 8	C25, 26	C45-48	C61, 62	C85, 86	C95, 96	C151, 152	C153, 154	D19	D39	F5. 6	F7. 8	F9, 10	F11	J4	K1	W32
1K	1.5K	1.2K	NO	4.7K	10K	1	0.1	100P	NO	NO	6800µ50	NO	10P	0.024	0.1	YES	YES	T4A	T2A	T6. 3A	T2A	E13-1403	YES	YES
2.7K	6.2K	NO	1K	NO	NO	NO	NO	470P	4700P	2200P	6800µ63	220P	10P	10µ35	NO	NO	NO	T4A	T2A	T6. 3A	T2A	F63-0078	NO	NO
1K	6.2K	NO	NO	NO	NO	NO	NO	100P	NO	NO	6800µ63	NO	10P	10µ35	NO	NO	NO	T4A	T2A	T2A	E63-0028	NO	YES	

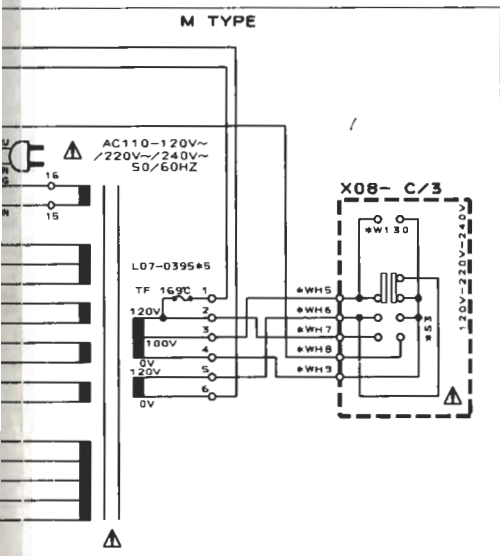


R60	F1	F2	F3	F4	CN13, 14	CN15, 16	J1	J2, 3	J7, 8	WH6	WH8	WE	W7	W12	2, 5	1
NO	T2A	T2A	NO	T3, 15A	YES	NO	NO	YES	NO	NO	YES	NO	YES	YES	NO	YES
47K	T2A	NO	NO	T3, 15A	NO	NO	NO	NO	YES	YES	NO	NO	NO	YES	NO	NO
NO	T2A	NO	NO	T3, 15A	NO	NO	NO	NO	NO	YES	NO	NO	NO	YES	YES	NO
47K	T2A	NO	T2, 5A	T3, 15A	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO



- 07 : 25C2003 (L, K)
- 01~5, 10 : B30-1012-05
- 01~2 : 155431 or H55104A
- 01~29, 31 : 155433 or H55104
- 35, 37, 38 : RD3, 3ES (B2)
- D80 : or HZS3.3N (B2)
- D32 : RD6, 8ES (B2)
- D33, 36 : or HZS6.8N (B2)
- D34 : RD2, 7ES (B2)
- or HZS2.7N (B2)
- or RD4, 7ES (B2)
- or HZS4.7N (B2)
- A1 : W02-1046-05
- or W02-0776-05



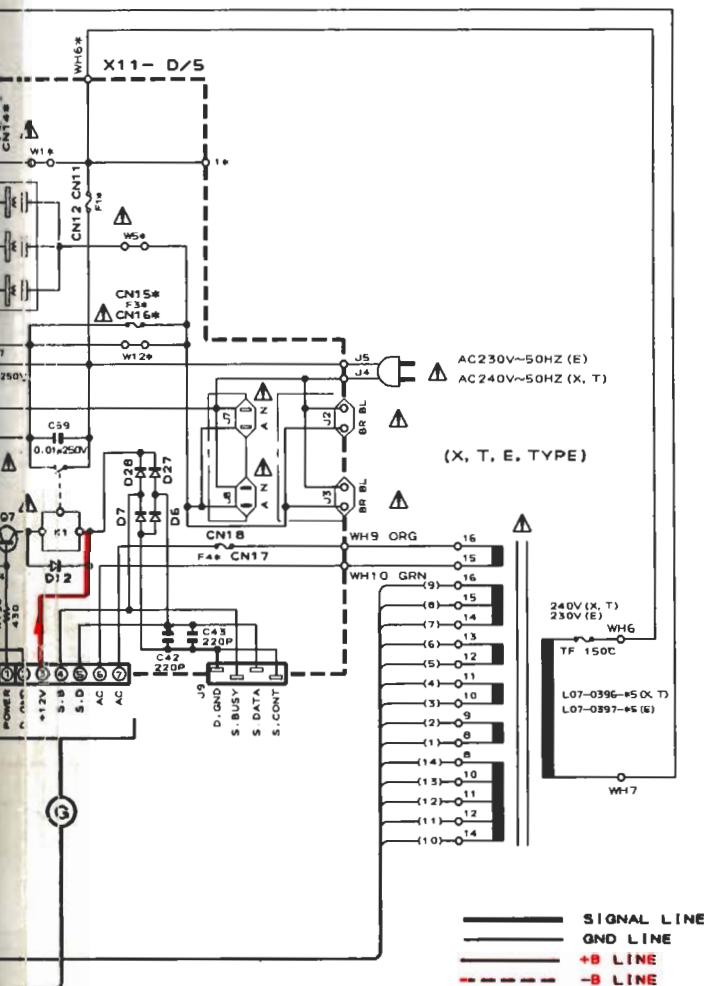


DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

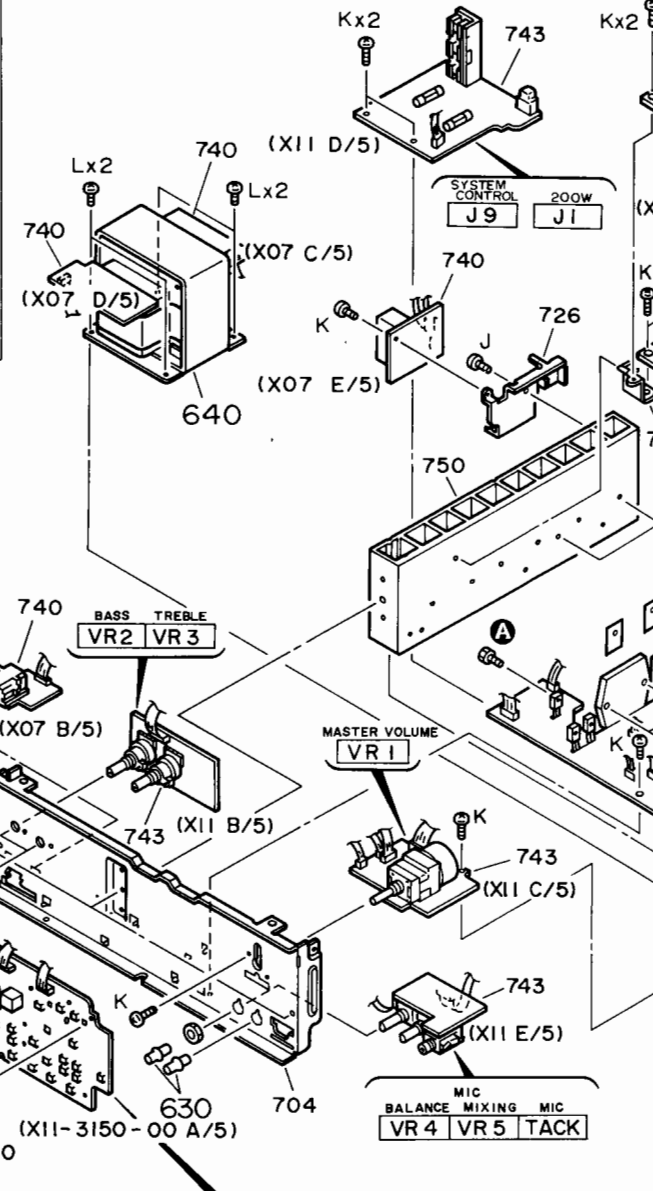
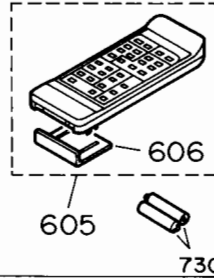
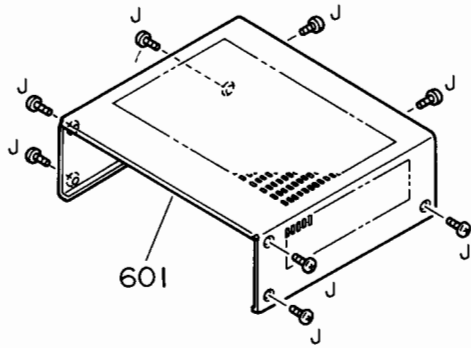
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

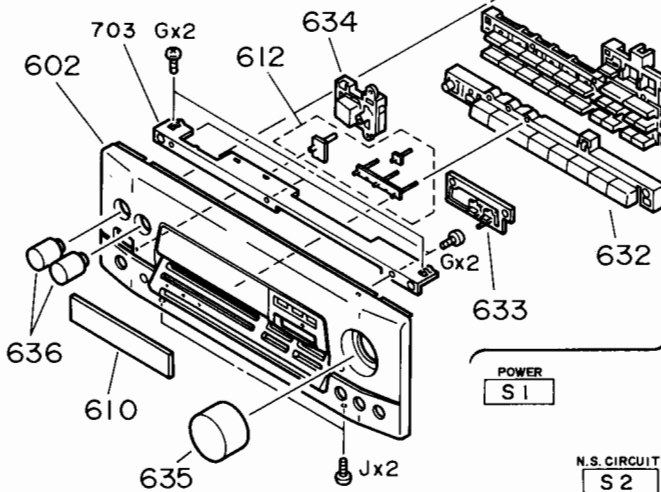


A-85

EXPLODED VIEW



- A** M3 x 12 (Hex-Tap) : N09-0333-05
- B** M3 x 16 (Hex-Tap) : N09-1236-05
- C** M3 x 8 R Tight : N09-1473-05
- D** M3 x 6 : N30-3006-46
- G** M2.6 x 8 (Bi-Tap) : N89-2608-46
- H** M3 x 6 (Bi-Tap) : N89-3006-46
- J** M3 x 8 (Bi-Tap) BLK : N89-3008-45
- K** M3 x 8 (Bi-Tap) : N89-3008-46
- L** M4 x 8 (Bi-Tap) BLK : N89-4008-45



EDI

OFF												PROLOGIC					
S33				S34				S35				/3 STEREO PRESENCE					
CENTER MODE CD DIRECT												S31			S32		
HIT		MELODY		ASSIST		VISUAL		FIX		DISPLAY		- SEAT POSITION +		- DELAY TIME +		- PRESENCE V	
S3		S4		S5		S6		S7		S8		S27		S28		S29	
ARENA		JAZZ CLUB		STADIUM		DISCO		CHURCH		MOVIE		- REAR VOL. +		- CENTER VO		S25	
S9		S10		S11		S12		S13		S14		S23		S24		S25	
N.S. CIRCUIT		ID/AUX		BS		VIDEO/DAT		TAPE A		TAPE B		TUNER		PHONO		CD	
S2		S15		S16		S17		S18		S19		S20		S21		S22	

PARTS LIST

NO. 2

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teil ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
L	1B	MAIN AMP UNIT (X07-2680-21: M, X, 00-51: T, 2-71: E)		
		N89-4008-46	BINDING HEAD TAPTIITE SCREW	
C1	.2	CF92FV1H104J	MF 0.10UF J	MX
C3	.4	CC45FSL1H101J	CERAMIC 100PF J	
C5	.6	CE04KW1A101M	ELECTRØ 100UF 10WV	
C7	.8	CC45FSL1H101J	CERAMIC 100PF J	
C9	.10	CC45FSL1H820J	CERAMIC 82PF J	
C11	.12	CC45FSL1H101J	CERAMIC 100PF J	
C13	.14	CC45FSL1H221J	CERAMIC 220PF J	
C15	.16	CK45FF1H103Z	CERAMIC 0.010UF Z	
C17	.18	CF92FV1H221J	MF 220PF C	
C19	.20	CC45FSL1H030C	CERAMIC 3.0PF C	
C21	.24	CF92FV1H104J	MF 0.10UF J	
C23	.26	CF92FV1H472J	MF 4700PF J	E
C25	.28	CF92FV1H487J	MF 6800PF J	
C27	.28	CF92FV1H487J	MF 6800PF J	
C29		CE04KW1H221M	ELECTRØ 220UF 50WV	
C30		CE04KW1H471M	ELECTRØ 470UF 50WV	
C31	.32	CC45FSL1H221J	CERAMIC 220PF J	
C33	.34	CE04KW1H221M	ELECTRØ 2.2UF 50WV	
C35	.36	CF92FV1H471J	MF 470PF J	
C37	.38	CE04KW1E30M	ELECTRØ 33UF 25WV	
C39	.40	CC45FSL1H221J	CERAMIC 220PF J	
C41	.44	CF92FV1H104J	MF 0.10UF J	
C43	.48	CF92FV1H221J	MF 2200PF J	
C45	.50	CK45FF1H103Z	CERAMIC 0.010UF Z	E
C47		C90-1351-05	NP-ELEC 3.3UF 50WV	
C49		CE04KW0J221M	ELECTRØ 220UF 6.3WV	
C51		C90-1351-05	NP-ELEC 3.3UF 50WV	
C52		CE04KW0J221M	ELECTRØ 220UF 6.3WV	
C53		C90-1351-05	NP-ELEC 3.3UF 50WV	
C54		CE04KW0J221M	ELECTRØ 220UF 6.3WV	
C55		C90-1332-05	NP-ELEC 10UF 25WV	
C56		CE04KW0J221M	ELECTRØ 220UF 6.3WV	
C57		CE04KW2A47M	ELECTRØ 4.7UF 100WV	
C58		CE04KW1H010M	ELECTRØ 1.0UF 50WV	
C59		CE04KW1A101M	ELECTRØ 100UF 10WV	
C60		CK45FF1H223Z	CERAMIC 0.022UF Z	
C61	.62	C90-1828-05	ELECTRØ 6800UF 50WV	MX
C62	.62	C90-1829-05	ELECTRØ 6800UF 63WV	TE
C63		CK45FE2H103P	CERAMIC 0.010UF P	
C64		CF92FV1H104J	MF 0.10UF J	
C65	.66	CE04KW1V22M	ELECTRØ 2200UF 35WV	
C67		CK45FE2H103P	CERAMIC 0.010UF P	
C68		CE04KW1H220H	ELECTRØ 220UF 50WV	
C69		CK45FF1H103Z	CERAMIC 0.010UF Z	
C70	.71	CE04KW1V102M	ELECTRØ 1000UF 35WV	
C72		CF92FV1H104J	MF 0.10UF J	
C73		CE04KW1E470M	ELECTRØ 47UF 25WV	
C74		CF92FV1H104J	MF 0.10UF J	
C75		CE04KW1C221M	ELECTRØ 220UF 16WV	
C76		CE04KW1E470M	ELECTRØ 47UF 25WV	
C77		CK45FF1H103Z	CERAMIC 0.010UF Z	
C78		CE04KW1C102M	ELECTRØ 1000UF 16WV	
C79		CF92FV1H104J	MF 0.10UF J	
C80		CE04KW1E470M	ELECTRØ 47UF 25WV	
C81		CE04KW1V221M	ELECTRØ 2200UF 35WV	

L:Scandinavia K:USA F:Canada
Y:PX(Far East, Hawaii) T:England E:Europe
Y:AAFE(S:Europe) X:Australia M:Other Areas
△ indicates safety critical components

NO. 1

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teil ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
A-85				
601	1A	A01-1810-01	METALLIC CABINET	
602	3A	* A60-0117-01	PANEL	
605	1B	* X94-1000-11	REMOTE CONTROL ASSY	
606		* A09-0115-13	BATTERY COVER	
610	3A	* B10-1880-03	FRONT GLASS	
612	3A	* B12-0170-03	INDICATOR	
-		* B09-0068-05	CAP	E
-		* B46-0098-23	WARRANTY CARD	X
-		* B46-0122-13	WARRANTY CARD	E
-		* 846-0143-13	WARRANTY CARD	T
-		* B52-0399-00	CONNECTING DIAGRAM	MX
-		* B52-0400-00	CONNECTING DIAGRAM	TE
-		* B60-0608-00	INSTRUCTION MANUAL (ENGLISH)	
-		* B60-0609-00	INSTRUCTION MANUAL (FRENCH)	E
-		* B60-0610-00	INSTRUCTION MANUAL (GERMAN)	E
-		* B60-0611-00	INSTRUCTION MANUAL (DUTCH)	E
-		* B60-0612-00	INSTRUCTION MANUAL (ITALIANO)	E
-		* B60-0613-00	INSTRUCTION MANUAL (SPANISH)	M
-		* B60-0652-00	INSTRUCTION MANUAL (CHINESE)	M
616	1D	E30-0459-05	AC POWER CORD	ME
616	1D	E30-1341-05	AC POWER CORD	X
616	1D	E30-1416-05	AC POWER CORD	T
616		E03-0114-05	AC OUTLET	X
-		* H50-0145-04	ITEM CARTON CASE	
-		* H10-5184-02	POLYSTYRENE FOAMED FIXTURE (L)	
-		* H10-5185-02	POLYSTYRENE FOAMED FIXTURE (R)	
-		* H25-0232-04	PROTECTION BAG (235X350X0.03)	MXE
-		* H25-0391-04	PROTECTION BAG	
-		* H25-0651-04	PROTECTION BAG (0232 PRINTED)	T
624	3D	J02-0366-15	FOOT	
625	3D	J02-1040-05	FOOT	
627	1D	J12-0091-05	PIN	
628	3C	J16-3180-05	UNIT HOLDER	
629	1D	J42-0083-05	POWER CORD BUSHING	
-		J61-0307-05	WIRE BAND	
630	3B	K29-3886-04	KNØB BALANCE, MIC MIXING	
631	3B	* K29-4242-02	KNØB SURROUND SELECTØR	
632	3B	* K29-4243-03	KNØB INPUT SELECTØR	
633	3A	* K29-4244-04	KNØB PROLOGIC/STEREO, PRESENCE	
634	3A	* K29-4245-03	KNØB POWER	
635	3A	* K29-4246-04	KNØB MASTER VOLUME	
636	3A	* K29-4247-04	KNØB BASS, TREBLE	
640	1B	* L07-0395-05	POWER TRANSFORMER	M
640	1B	* L07-0396-05	POWER TRANSFORMER	XT
640	1B	* L07-0397-05	POWER TRANSFORMER	E
C	1D	N09-1473-05	TAPPING SCREW (M3X8)	
G	3A, 2B	N89-2608-46	BINDING HEAD TAPTIITE SCREW	
H	2B	N89-3006-46	BINDING HEAD TAPTIITE SCREW	
J	1A, 1D	N89-3008-45	BINDING HEAD TAPTIITE SCREW	
K	1B, 2B	N89-3008-46	BINDING HEAD TAPTIITE SCREW	

L:Scandinavia K:USA F:Canada
Y:PX(Far East, Hawaii) T:England E:Europe
Y:AAFE(S:Europe) X:Australia M:Other Areas
△ indicates safety critical components

PARTS LIST

NO. 4

* New Parts
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Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名/規格	Desti- nation 向標	Re- marks 備考
K1 -6		*	S76-0008-05	MAGNETIC RELAY	MX TE	
K2 -6		*	S76-0008-05	MAGNETIC RELAY		
K7		*	S76-0015-05	MAGNETIC RELAY		
D1			D5SBA20F03	DIODE	TE TE	
D2			D3SBA20F03	DIODE		
D3 -11			S55668	DIODE		
D12 -18			HSS104A	DIODE		
D12 -18			1SS131	DIODE		
D12 -20			HSS104A	DIODE	MX MX TE TE	
D20			HSS131	DIODE		
D21			HSS131	DIODE		
D21			HZ54.7N(B)	ZENER DIODE		
D21			RD4.7ES(B)	ZENER DIODE		
D22 -28			HSS104A	DIODE	MX TE	
D22 -28			1SS131	DIODE		
D29			HZ56.2N(B2)	ZENER DIODE		
D29			RD6.2ES(B2)	ZENER DIODE		
D30 -33			HSS104A	DIODE		
D30 -33			1SS131	DIODE	MX TE	
D34			S36680	DIODE		
D35			HSS104A	DIODE		
D35			1SS131	DIODE		
D36 +37			HSS104A	DIODE		
D36 +37			1SS131	DIODE	MX TE	
D38 -42			HSS104A	DIODE		
D38 -42			1SS131	DIODE		
IC1			UPC7805HF	IC(VOLTAGE REGULATOR/ +5V)		
IC2			NJM4580L-D	IC(OP AMP)		
IC3		*	UPC7815HF	IC(VOLTAGE REGULATOR/ +15V)	MX TE	
IC4		*	STK4145MK2	IC(AFP POWER AMP)		
IC4		*	STK4145MK5	IC(AFP POWER AMP)		
Q1 -4		*	2SA992(F,E)	TRANSISTOR		
Q5 -8			2SC1845(F,E)	TRANSISTOR		
Q9 -10			2SB1503	TRANSISTOR	MX TE	
Q11 -12			2SD2276	TRANSISTOR		
Q13 -14			2SA992(F,E)	TRANSISTOR		
Q15 -16			2SC1845(F,E)	TRANSISTOR		
Q21 -22			2SC4137(V,W)	TRANSISTOR		
Q23 -24			2SC2878(B)	TRANSISTOR	MX TE	
Q25			2SA733(A)(Q,P)	TRANSISTOR		
Q25			2SA933S(Q,R)	TRANSISTOR		
Q26			2SB941	TRANSISTOR		
Q27 -28			2SA733(A)(Q,P)	TRANSISTOR		
Q27 -28			2SA933S(Q,R)	TRANSISTOR	MX TE	
Q29			2SC1740S(Q,R)	TRANSISTOR		
Q29			2SC945(A)(Q,P)	TRANSISTOR		
Q30			2SC2003(L,K)	TRANSISTOR		
Q31			DT124ES	DIGITAL TRANSISTOR		
Q32			2SA1123(R,S)	TRANSISTOR	MX TE	
Q33 -34			2SC2878(B)	TRANSISTOR		
Q35 -36			2SA733(A)(Q,P)	TRANSISTOR		
Q35 -36			2SA933S(Q,R)	TRANSISTOR		
Q37 -38			2SC1740S(Q,R)	TRANSISTOR		

L:Scandinavia
K:USA
P:Canada
Y:PX(Far East, Hawaii)
E:Europe
Y:AAFE(S)(Europe)
X:Australia
M:Other Areas

△ indicates safety critical components.

NO. 3

* New Parts
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Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名/規格	Desti- nation 向標	Re- marks 備考
C82			CE04KW1H100M	ELECTRO	TE MX MX MX TE	
C83 ,84			CF92FV1H473J	MF		
C87			CE04KW1H100M	ELECTRO		
C88 ,89			CE04KW1H101M	ELECTRO		
C90			CE04KW1HR47H	ELECTRO		
C91			C90-1334-05	NP-ELEC		
C92 ,93			CE04KW1H470M	ELECTRO		
C94			CE04KW1H47H	ELECTRO		
C95 ,96			C91-0721-05	CERAMIC		
C97 ,98			CE04KW1H470M	ELECTRO		
C99 ,100			CE04KW1H47H	ELECTRO		
C101 ,102			CE04KW1H220M	ELECTRO		
C103			CK45FF1H23Z	CERAMIC		
C104			CK45FF1H23Z	CERAMIC		
C105-108			CK45FE2H103P	CERAMIC		
C151 ,152			CE04KW1V100M	ELECTRO	MX MX	
C151 ,152			CF92FV1H243J	MF		
C151 ,154			CF92FV1H104J	MF		
C155 ,156			CC45FSL1H220J	CERAMIC		
C155 ,156						
J1			E70-0008-05	LOCK TERMINAL BOARD SPEAKERS	MX TE	
J2			E11-0208-05	PHONE JACK PHONES		
J4		*	E13-1403-05	PHONE JACK SURROUND SPEAKERS		
J4		*	E43-0028-05	PHONE JACK SURROUND SPEAKERS		
J5			E08-0411-05	RECTANGULAR RECEPTACLE POWER		
F5 ,6			F05-4025-05	FUSE (SEMK0) (250V T4A)	MX TE	
F7 ,8			F06-2021-05	FUSE (SEMK0) (250V T2A)		
F9 ,10			F06-5321-05	FUSE (SEMK0) (250V T3A)		
F11			F06-2021-05	FUSE (SEMK0) (250V T2A)		
CN2 -13			J13-0075-05	FUSE CLIP		
CN15 ,16			J13-0075-05	FUSE CLIP	MX TE	
L1 -4			L39-0085-05	PHASE-COMPENSATION COIL		
A			N09-0333-05	TAPPING SCREW (3X12)		
B		2C	N09-1236-05	TAPPING SCREW (3X16)		
J		1C,2C	N89-3008-45	BINDING HEAD TAPPLITE SCREW		
K		1C,2C	N89-3008-46	BINDING HEAD TAPPLITE SCREW	MX TE	
CPI ,2			R90-0187-05	MULTI-COMP		
R11 ,12			RN14BK2C1960F	RN		
R13 ,14			RD14AB2E221J	FL-PROOF RD		
R15 ,16			RD14AB2E332J	FL-PROOF RD		
R17 ,18			RD14AB2E221J	FL-PROOF RD	MX TE	
R23 ,24			RD14AB2E271J	FL-PROOF RD		
R27 -30			RD14AB2E4R7J	FL-PROOF RD		
R45			RD14AB2E330J	FL-PROOF RD		
R46			RD14AB2E560J	FL-PROOF RD		
R49 ,50			RD14AB2E100J	FL-PROOF RD	MX TE	
R51 ,52			RS140B3D100J	FL-PROOF RS		
R55 ,56			RS140B3D680J	FL-PROOF RS		
R67 ,68			RD14AB2E101J	FL-PROOF RD		
R71 ,72			RS140B3D100J	FL-PROOF RS		
R103 ,104			RD14AB2E100J	FL-PROOF RD	MX TE	
R110 ,111			RD14AB2E1R0J	FL-PROOF RD		
R112			RD14AB2E1S2J	FL-PROOF RD		
R142			RD14AB2E103J	FL-PROOF RD		
R142						

L:Scandinavia
K:USA
P:Canada
Y:PX(Far East, Hawaii)
E:Europe
Y:AAFE(S)(Europe)
X:Australia
M:Other Areas

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PARTS LIST

NO. 6

✕ New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 部品番号	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 向	Re- marks 備考
IC1			TC9163N	IC(BILATERAL SWITCH X16)		
IC2			TC9164N	IC(16CH BILATERAL SELECTOR SW)		
IC3			TC9215P	IC(ANALOG SWITCH X 6)		
IC4 -6			ALM5055D	IC(OP AMP X4)		
IC4 -6			UPC4574C	IC(OP AMP X4)		
IC7 ,8			NJM456D-D	IC(OP AMP X2)		
IC9			NJM456SL	IC		
IC10			IC4052BF	IC(4CH HPX/DE-MPX)		
IC11			IC14577A	IC		
IC12			NJM456SD-D	IC(OP AMP X2)		
Q1 -6			25C17405(Q,R)	TRANSISTOR		
Q11			25C3311A(Q,R)	TRANSISTOR		
Q11			25C17405(Q,R)	TRANSISTOR		
Q11			25C3311A(Q,R)	TRANSISTOR		
Q12 ,13			25A1309A(Q,R)	TRANSISTOR		
Q12 ,13			25A9335(Q,R)	TRANSISTOR		
Q14 ,15			DTC124ES	DIGITAL TRANSISTOR		
Q14 ,15			UN4212	TRANSISTOR		
CONTROL UNIT (X11-3150-21: M, 0-71: X, 0-51: T, 2-71: E)						
D1 -5			B30-1012-05	LED(SLP-981C-50)		
D10			B30-1012-05	LED(SLP-981C-50)		
PL1 ,2			B30-2407-05	LAMP		
C1 -2			CE04KW1H3R3M	ELECTRØ		50WV
C3 ,4			CC45FSL1H221J	CERAMIC		220PF J
C5 ,6			CC45FSL1H101J	CERAMIC		100PF J
C7 ,8			CF92FV1H563J	MF		0.056UF J
C9 ,10			CK45FB1H561K	CERAMIC		560PF K
C11 ,12			CE04KW1V4R7M	ELECTRØ		4.7UF 35WV
C13 ,14			CE04KW1V100M	ELECTRØ		10UF 35WV
C15 ,16			CF92FV1H393J	MF		0.039UF J
C23 ,24			CF92FV1H683J	MF		0.068UF J
C25			CE04KW1V100M	ELECTRØ		10UF 35WV
C26			C90-1332-05	NP-ELEC		10UF 25WV
C31			CF92FV1H104J	MF		0.10UF J
C32			C90-3222-05	ALUMINIUM ELECTROLYTIC C.		220UF 25WV
C33			C90-3242-05	ALUMINIUM ELECTROLYTIC C.		420UF 25WV
C34			C90-3222-05	ALUMINIUM ELECTROLYTIC C.		220UF 25WV
C35			C90-1827-05	BACKUP		0.047F 5.5WV
C36 ,37			C91-0769-05	CERAMIC		0.01UF K
C38			C90-3222-05	ALUMINIUM ELECTROLYTIC C.		220UF 25WV
C40			C90-3258-05	ALUMINIUM ELECTROLYTIC C.		580UF 25WV
C41			C91-0769-05	CERAMIC		0.01UF K
C42 ,43			CC45FSL1H221J	CERAMIC		220PF J
C51 ,52			CE04KW1E470M	ELECTRØ		470UF 25WV
C55			CE04KW1E101M	ELECTRØ		100UF 25WV
C56			C90-1333-05	NP-ELEC		22UF 10WV
C57			C91-0971-05	FILM		0.01UF 250WV
C59			C91-1421-05	FILM		0.01UF 250AC
C60			C992FM1H472J	MYLAR		4700PF J
C61			CC45FSL1H221J	CERAMIC		220PF J
C62			CF92FV1H473J	MF		0.047UF J
C63			CC45FSL1H221J	CERAMIC		220PF J
C64			CE04KW1V100M	ELECTRØ		10UF 35WV
C65			CK45FB1H561K	CERAMIC		560PF K

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NO. 5

✕ New Parts
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Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 部品番号	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 向	Re- marks 備考
Q37 ,38			25C945(A,Q,P)	TRANSISTOR		
Q39 -44			25C2003(L,K)	TRANSISTOR		
Q40 -44			25C2003(L,K)	TRANSISTOR		
PRE AMPLIFIER UNIT (X08-2470-21: M, 2-71: X, T, E)						
C1 ,2			CC45FSL1H221J	CERAMIC		220PF
C3 ,4			CE04KW1V100M	ELECTRØ		10UF 35WV
C5 ,6			CC45FSL1H101J	CERAMIC		100PF J
C7 ,8			CE04KW1A101M	ELECTRØ		100UF 10WV
C9 ,10			CC45FSL1H221J	CERAMIC		220PF J
C11 ,12			CF92FV1H123J	MF		0.012UF J
C13 ,14			CF92FV1H332J	MF		3300PF J
C15 ,16			CE04KW1V100M	ELECTRØ		10UF 35WV
C17 -24			C91-0749-05	CERAMIC		220PF K
C25 -36			CC45FSL1H221J	CERAMIC		220PF J
C37 ,38			CE04KW1H010M	ELECTRØ		1.0UF 50WV
C39 ,40			CE04KW1HR22M	ELECTRØ		0.22UF 50WV
C41 -48			CE04KW1V100M	ELECTRØ		10UF 35WV
C51 ,52			CE04KW1A101M	ELECTRØ		100UF 10WV
C54 -59			CE04KW1E470M	ELECTRØ		47UF 25WV
C60 ,61			CF92FV1H103J	MF		0.010UF J
C62 -65			CE04KW1E470M	ELECTRØ		47UF 25WV
C66 ,67			CK45FB1H102K	CERAMIC		1000PF K
C68 ,69			CK45FB1H391K	CERAMIC		390PF K
C72 ,73			CK45FF1H223Z	CERAMIC		0.022UF Z
C74 ,75			C91-0085-05	CERAMIC		0.022UF N
C76 ,77			CK45FF1H223Z	CERAMIC		0.022UF Z
C78			C91-0085-05	CERAMIC		0.022UF N
C101 ,102			CE04KW1E470M	ELECTRØ		47UF 25WV
C103 ,104			CE04KW0J221M	ELECTRØ		220UF 6.3WV
C105 ,106			CK45FF1H223Z	CERAMIC		0.022UF Z
J1			E13-0249-05	PHONO JACK PHONO		
J2			E13-0633-05	PHONO JACK CD, TUNER, TAPE REC		
J3			E13-0445-05	PHONO JACK TAPE PLAY, ADAPTER		
J4			E13-0633-05	PHONO JACK ADAPTER, VIDEO/DAT		
J5			E13-0445-05	PHONO JACK BS, LD/AUX		
J6			E13-0313-05	PHONO JACK PLAY, BS, LD/AUX		
J7			E13-0297-05	PHONO JACK MONITOR, REC		
CPI			R90-0490-05	MULTI-COMP		J 1/6W
R160 ,161			RS14KB3A560J	FL-PROOF RS 56		J 1W
R219			R014B2BSR6J	FL-PROOF RD 5.6		J 1/4W
S1 ,2			S31-2094-05	SLIDE SWITCH CENTER SP/REAR SP		
S3			S31-2322-05	SLIDE SWITCH VOLTAGE SELECTOR		M
D1 -2			HZS11N(B2)	ZENER DIODE		
D1 ,2			R011ES(B2)	ZENER DIODE		
D3			HZS4-7N(B)	ZENER DIODE		
D3			R04-7ES(B)	ZENER DIODE		
D5 -12			HSS104	DIODE		
D5 -12			LSS133	DIODE		
D13 ,14			HZS4-7N(B)	ZENER DIODE		
D13 ,14			R04-7ES(B)	ZENER DIODE		
D15 -18			HSS104	DIODE		
D15 -18			LSS133	DIODE		

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PARTS LIST

NO. 8

* New Parts
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Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 向	Re- marks 備考
E01		10-BT-86GK	FLUORESCENT INDICATOR TUBE		
IC1		CXP50112-342Q	IC (DUAL COMPALATOR)		
IC2		BA10393	IC		
IC3		NJM4580D-D	IC (NOTOR CONTROL)		
IC4		TA8409S	IC		
IC5		NJM4580D-D	IC		
Q1	-6	2SC1740S(Q,R)	TRANSISTOR		
Q1	-6	2SC3311A(Q,R)	TRANSISTOR		
Q7		2SC2003(L,N)	TRANSISTOR		
Q8	,9	2SC1740S(Q,R)	TRANSISTOR		
Q8	,9	2SC3311A(Q,R)	TRANSISTOR		
Q10		2SA1309A(Q,R)	TRANSISTOR		
Q10		2SA933S(Q,R)	TRANSISTOR		
A1		W02-0776-05	ELECTRIC CIRCUIT MODULE		
A1		W02-1046-05	ELECTRIC CIRCUIT MODULE		
SIGNAL PROCESSOR UNIT (X32-2030-00)					
C1	,6	CE04KWJ331M	ELECTRO		6.3KV
C5		CE04KW1H010M	ELECTRO		50WV
C12		CK45EF1H472Z	CERAMIC		4700PF
C15	,16	CE04KW1V100M	ELECTRO		10UF 35WV
C17	,18	CE04KW1E470M	ELECTRO		47UF 25WV
C19	-22	CE04KW1V100M	ELECTRO		10UF 35WV
C25	,26	CE04KW1V100M	ELECTRO		10UF 35WV
C27	-30	C992FM1H272J	MYLAR		2700PF J
C31	,32	C992FM1H512J	MYLAR		5100PF J
C35	,36	CF92FV1H104J	MF		0.10UF J
C37		CE04KW1A101M	ELECTRO		100UF 10WV
C38		CE04KW1V4R7M	ELECTRO		4.7UF 35WV
C39		CE04KW1C470M	ELECTRO		47UF 16WV
C40		CE04KW1HR33M	ELECTRO		0.33UF 50WV
C41		CF92FV1H104J	MF		0.10UF J
C42		CF92FV1H333J	MF		0.033UF J
C43		CE04KW1H010M	ELECTRO		1.0UF 50WV
C44		CF92FV1H272J	MF		0.027UF J
C45		CF92FV1H472J	MYLAR		4700PF J
C46		CE04KW1C220M	ELECTRO		22UF 16WV
C47		CE04KW1C101M	ELECTRO		100UF 16WV
C48		C992FM1H822J	MYLAR		8200PF J
C49		CE04KW1V100M	ELECTRO		10UF 35WV
C51		CE04KW1V4R7M	ELECTRO		4.7UF 35WV
C52		CE04KW1V100M	ELECTRO		10UF 35WV
C53	-56	C992FM1H272J	MYLAR		2700PF J
C57	,58	C992FM1H512J	MYLAR		5100PF J
C61	,62	CE04KW1E470M	ELECTRO		47UF 25WV
C63	,64	CE04KW1H010M	ELECTRO		1.0UF 50WV
C65	,66	CC45ESL1H101J	CERAMIC		100PF J
C67	-70	CE04KW1E470M	ELECTRO		47UF 25WV
C71		CK45FB1H102K	CERAMIC		1000PF K
C73	-76	C992FM1H103J	MYLAR		0.010UF J
C77		CF92FV1H104J	MF		0.10UF J
C78		CE04KW1V100M	ELECTRO		10UF 35WV
C79		CF92FV1H104J	MF		0.10UF J
C80		CE04KW1V100M	ELECTRO		10UF 35WV
C81	-86	CF92FV1H104J	MF		0.10UF J

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NO. 7

* New Parts
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Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 向	Re- marks 備考
C66	,67	CE04KW1V100M	ELECTRO		
C68	,69	CE04KW1E470M	ELECTRO		35WV
C70		C71-0787-05	CERAMIC		47UF 25WV
C71	,72	CE04JWJ221M	ELECTRO		0.01UF K
			ELECTRO		220UF 6.3WV
△ J2	,3	E03-0108-05	AC OUTLET		
J6		E11-0206-05	PHONE JACK		
△ J7	,8	E03-0109-05	AC OUTLET		
J9		E08-0311-05	RECTANGULAR RECEPTACLE SYSTEM		
J9		E08-0312-05	RECTANGULAR RECEPTACLE SYSTEM		
F1		F05-4025-05	FUSE (SEMKO) (250V T4A)		
F1		F06-2021-05	FUSE (SEMKO) (250V T2A)		
F2		F06-2021-05	FUSE (SEMKO) (250V T2A)		
F3		F05-2525-05	FUSE (SEMKO) (250V T2.5A)		
F4		F05-3121-05	FUSE (SEMKO) (250V T3.15A)		
		J19-3433-03	HOLDER		
CN11	-14	J13-0075-05	FUSE CLIP		
CN11	,12	J13-0075-05	FUSE CLIP		
CN15	-18	J13-0075-05	FUSE CLIP		
CN17	,18	J13-0075-05	FUSE CLIP		
X1		L78-0267-05	RESONATOR		
CP1		R90-0816-05	MULTIPLE RESISTOR		
CP2	,3	R90-0850-05	MULTIPLE RESISTOR		
R121	,122	R014GB2E121J	FL-PROOF RD 120		J 1/4W
R127	,128	R014GB2E100J	FL-PROOF RD 10		J 1/4W
R145	,146	R014GB2E121J	FL-PROOF RD 120		J 1/4W
VR1		R29-5057-05	POTENTIOMETER MASTER VOLUME		
VR2	,3	R06-5193-05	POTENTIOMETER BASS TREBLE		
VR4		R05-5037-05	POTENTIOMETER BALANCE		
VRS		R10-5042-05	POTENTIOMETER MIC MIXING		
K1		S76-0009-05	MAGNETIC RELAY		
S1	-36	S40-1064-05	PUSH SWITCH SELECTOR		
D12		HSS104A	DIODE		
D12		LS5131	DIODE		
D13	-26	HSS104	DIODE		
D13	-26	LS5133	DIODE		
D29		HSS104	DIODE		
D29		LS5133	DIODE		
D30		HZ53.3N(B2)	ZENER DIODE		
D30		RD3.3ES(B2)	ZENER DIODE		
D31		HSS104	DIODE		
D31		LS5133	DIODE		
D32		HZ56.8N(B2)	ZENER DIODE		
D32		RD6.8ES(B2)	ZENER DIODE		
D33		HZ52.7N(B2)	ZENER DIODE		
D33		RD2.7ES(B2)	ZENER DIODE		
D34		HZ54.7N(B2)	ZENER DIODE		
D34		RD4.7ES(B2)	ZENER DIODE		
D35		HSS104	DIODE		
D35		LS5133	DIODE		
D36		HZ52.7N(B2)	ZENER DIODE		
D36		RD2.7ES(B2)	ZENER DIODE		
D37	,38	HSS104	DIODE		
D37	,38	LS5133	DIODE		

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Y:AF(Europe)

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PARTS LIST

NO. 10

X New Parts
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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 向	Re- marks 備考
IC16, 17						
IC18		*	NJM4558D	IC(OP AMP X2)		
IC19, 20			TC74HC08AP	IC (AND GATE)		
IC19, 20			UPD74HC08C	IC (RAM)		
IC21, 22		*	HM50464RP-12	IC (D RAM)		
IC23		*	LM33464G-12	IC (DIGITAL FILTER & D/A CONVER		
IC24		*	LC7883K	IC		
IC25		*	UP078214CW-770	IC		
Q1, 2			LC66516B-4733	IC		
Q3			LC83010N	IC (DIGITAL SIGNAL PROCESSOR)		
Q3			2S01266	TRANSISTOR		
Q4			DTCL24ES	DIGITAL TRANSISTOR		
			UN4212	TRANSISTOR		
			2SC1923(R, 0)	TRANSISTOR		

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NO. 9

X New Parts
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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 向	Re- marks 備考
C87			CK45FF1H103Z	CERAMIC		
C88			CE04KW1A101M	ELECTRO	Z	
C91			CE04KW1A101M	MF	10WV	
C92			CF92RV1H104J	0.10UF	J	
C93			CE04KW1V4R7M	4.7UF	35WV	
			CK45FB1H102K	1000PF	K	
C95, 96			CE04KW1A101M	ELECTRO	10WV	
C97, 98			CF92RV1H104J	MF	0.10UF	J
C99, 100			CE04KW1A101M	ELECTRO	10WV	
C101, 102			CF92RV1H104J	MF	0.10UF	J
C103			CK45FF1H103Z	CERAMIC	0.010UF Z	
C107			CK45FF1H103Z	CERAMIC	0.010UF Z	
C108			CE04KW1V100M	ELECTRO	10UF	35WV
C109			CE04KW1A101M	ELECTRO	100UF	10WV
C110			C91-0769-05	CERAMIC	0.01UF	K
C113			CF92RV1H104J	MF	0.10UF	J
C114			CE04KW1A101M	ELECTRO	100UF	10WV
C115			CF92RV1H104J	MF	0.10UF	J
C116			CE04KW1A101M	ELECTRO	100UF	10WV
C117, 118			CC45FCH1H220J	CERAMIC	22PF	J
C119, 120			CK45FF1H103Z	CERAMIC	0.010UF Z	
C121			CF92RV1H104J	MF	0.10UF	J
C122			CE04KW1A101M	ELECTRO	100UF	10WV
L1 -15			L40-1001-17	SMALL FIXED INDUCTOR(10UH,K)		
X1			L78-0277-05	RESONATOR		
X2			L78-0244-05	RESONATOR		
X3			L77-1199-05	CRYSTAL RESONATOR		
CP1			R90-0800-05	MULTI-COMP	100KX6	J 1/4W
CP2			R90-0853-05	MULTI-COMP	100KX9	J 1/6W
CP3			R90-0493-05	MULTI-COMP	100KX9	J 1/6W
CP4			R90-0864-05	MULTI-COMP	100KX9	J 1/6W
CPS, 6			R90-0493-05	MULTI-COMP	100KX9	J 1/6W
CP7			R90-0850-05	MULTI-COMP	100KX5	J
CP8			R90-0853-05	MULTI-COMP	100KX4	J 1/6W
CP9			R90-0482-05	FL-PR00F RS	33	J 2W
R4			RS14KB3D330J	FL-PR00F RS	2.2	J 1W
R19			RS14KB3A220J	FL-PR00F RS	2.2	J 1W
R139, 140			RS14KB3D181J	FL-PR00F RS	180	J 2W
D1			HSS104	DIODE		
D1			LSS133	DIODE		
D3 -10			HSS104	DIODE		
D3 -10			LSS133	DIODE		
IC2			TC9213P	IC(2CH ELECTRONIC VOLUME)		
IC3, 4			NJM45650-D	IC(OP AMP X2)		
IC5			LA2730	IC(DOLBY SYSTEM)		
IC6			NJM45650-D	IC(OP AMP X2)		
IC7, 8			UPC4072C	IC(OP AMP X2)		
IC9			UPC7805HF	IC(VOLTAGE REGULATOR/ +5V)		
IC10			NJM45650-D	IC(OP AMP X2)		
IC11		*	NJM431L	IC(REGULATOR)		
IC11			TL431CLP	IC		
IC12			UPC7805HF	IC(VOLTAGE REGULATOR/ -5V)		
IC13, 14			UPC7805HF	IC(VOLTAGE REGULATOR/ +5V)		
IC15			CS5339-XP	IC(A/D CONVERTER)		

L:Scandinavia
Y:PA(Far East, Hawaii)
Y:AFES(Europe)

K:USA
T:England
X:Australia

P:Canada
E:Europe
M:Other Areas

△ indicates safety critical components

SPECIFICATIONS

Rated power output

Front

(IEC/NF) from 63Hz to 12,500Hz, 0.7% T.H.D.

at 8 Ω 70W + 70W

(DIN) 1,000Hz at 8 Ω 70W + 70W

Center

(DIN) 1,000Hz, 0.9% T.H.D. at 8 Ω 15W + 15W

Rear

(DIN) 1,000Hz, 0.9% T.H.D. at 8 Ω 15W + 15W

Total harmonic distortion(1kHz, 8 Ω)..... 0.02% at 35W

Frequency response

CD..... 20Hz~ 70kHz +0dB, -3dB

Signal to noise ratio (IHF - A)

PHONO (MM)..... 75dB for 2.5mV input

CD,TAPE,VIDEO..... 95dB for 200mV input

Signal to noise ratio (DIN weighted at 50mW output)

PHONO (MM)..... 58dB

CD,TAPE,VIDEO..... 59dB

Input sensitivity/Impedance

PHONO(MM)..... 2.5 mV/47k Ω

CD,TAPE, VIDEO..... 200mV/47k Ω

MIC 1.5mV/47k Ω

Tone controls

BASS..... \pm 10dB (at 100Hz)

TREBLE..... \pm 10dB (at 10kHz)

N.B.circuit (-30dB Volume level)..... + 12 dB (at 55Hz)

Output

SUPER WOOFER OUT..... 1.8 V/600 Ω

General

Power consumption..... 220 W

Dimensions..... W: 360 mm

H: 129 mm

D: 380 mm

Weight (net)..... 9.3 kg

AC outlets(switched) 2 (Total 200W max)

Note:

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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KENWOOD ELECTRONICS AUSTRALIA PTY. LTD. (INCORPORATED IN NSW)

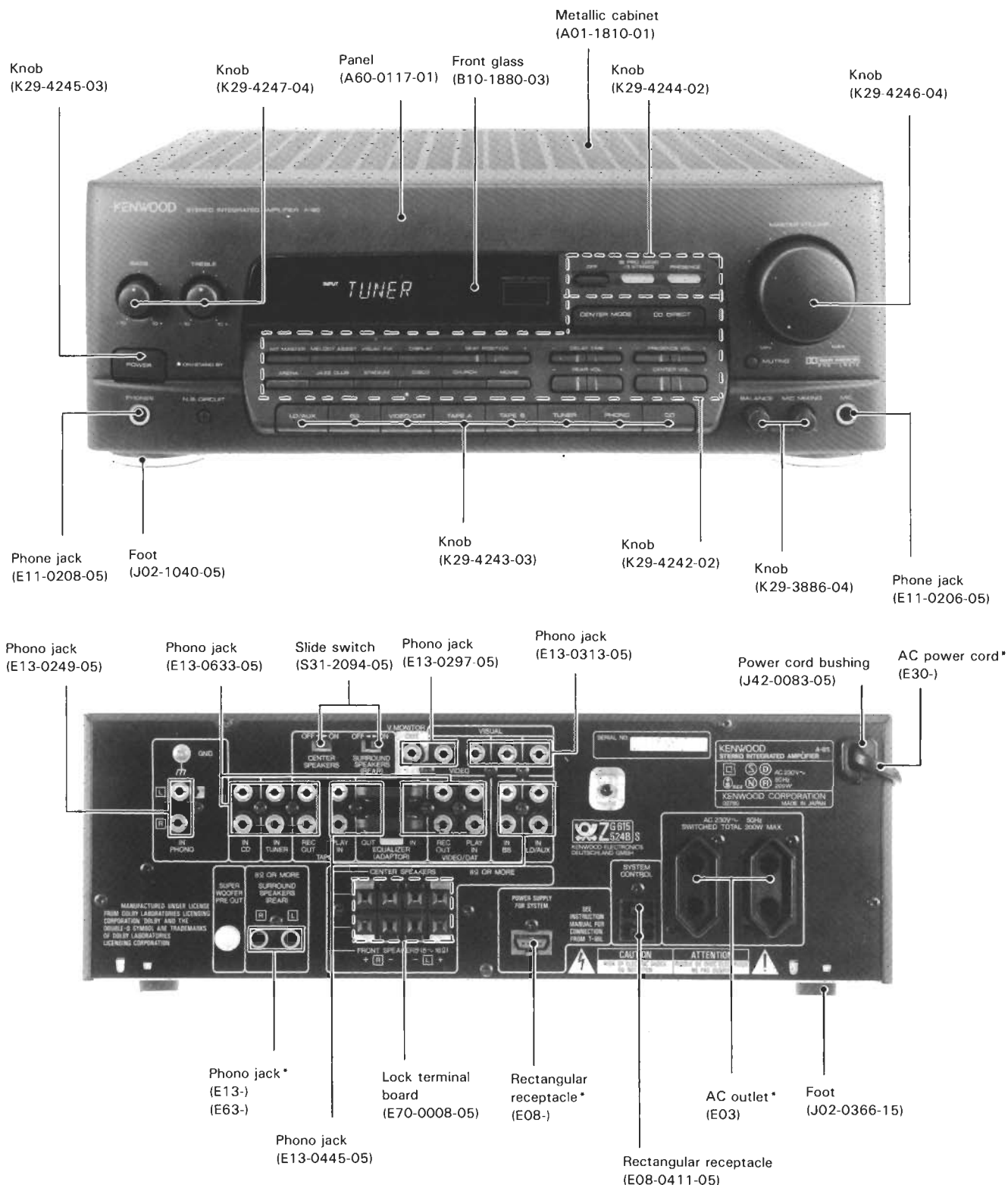
P.O. Box 504, 8 Figtree Drive, Australia Centre, Homebush, N.S.W. 2140, Australia

KENWOOD & LEE ELECTRONICS, LTD.

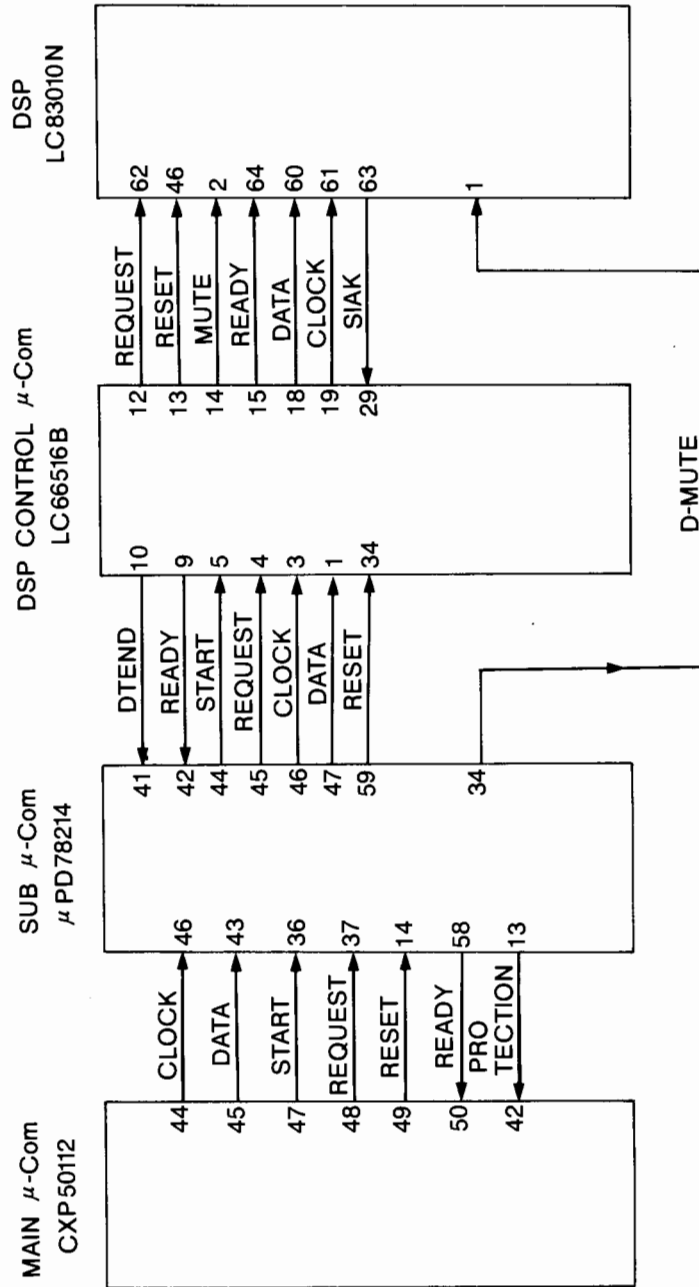
Wang Kee Building, 4th Floor, 34-37, Connaught Road, Central, Hong Kong

A-85

SERVICE MANUAL MICROPROCESSOR EDITION



Micro processor



CIRCUIT DESCRIPTION

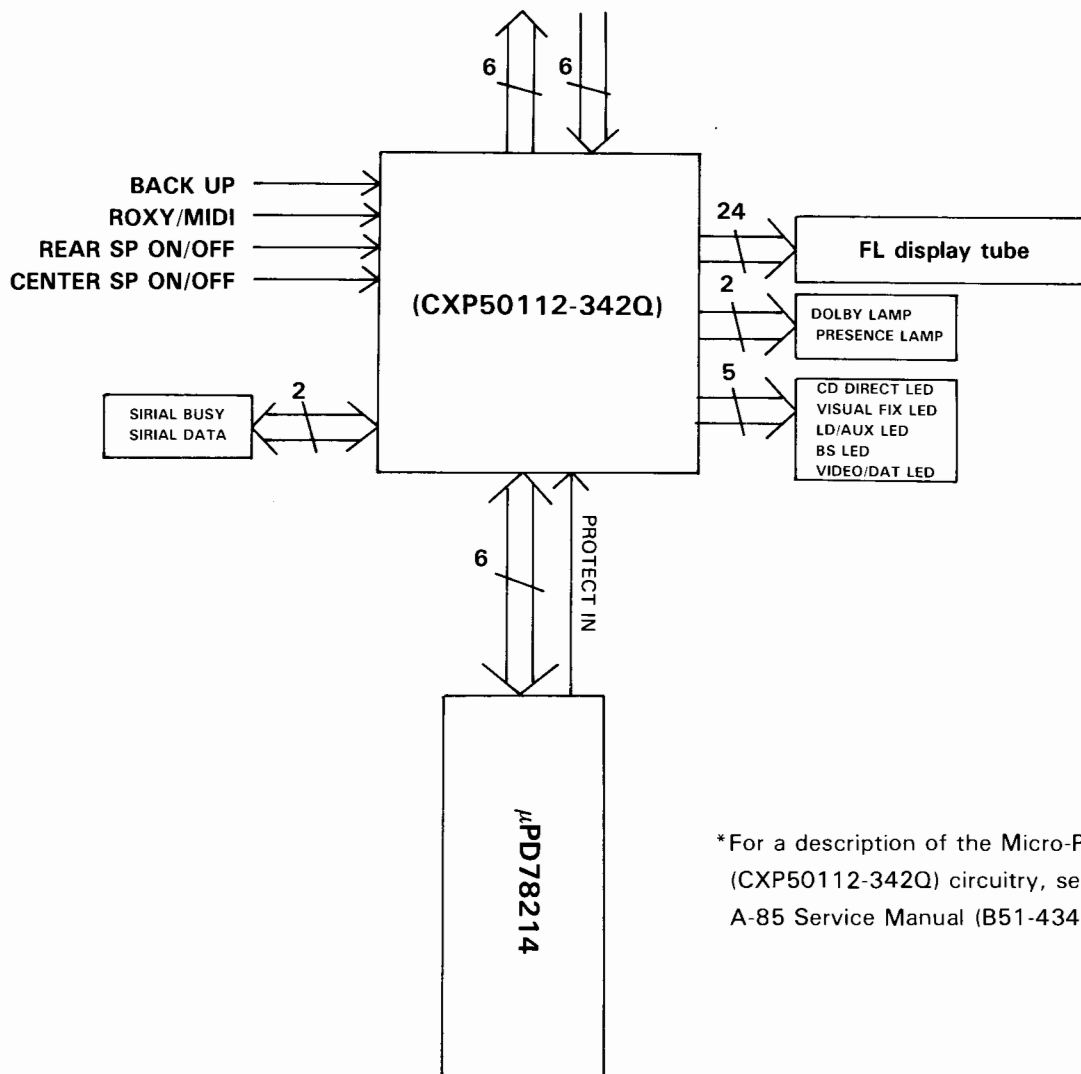
A-85

Microprocessor

Block diagram of microcomputer's peripheral equipment

SCAN 5	OFF	PRESENCE	3STEREO	CD DIRECT	MUTE	CENTER MODE
SCAN 4	HIT MASTER	POWER	MELODY ASSIST	JAZZ CLUB	NB CIRCUIT	ARENA
SCAN 3	DISCO	LD/AUX	VISUAL FIX	STADIUM	BS	DISPLAY
SCAN 2	CHURCH	VIDEO DAT	TAPE A	MOVIE	SEAT-P FRONT	SEAT-P REAR
SCAN 1	DELAY DOWN	TAPE B	TUNER	REAR UP	DELAY UP	REAR DOWN
SCAN 0	PHONO	P-VOL. UP	CENTER UP	CD	P-VOL. DOWN	CENTER DOWN

RETURN 0 RETURN 1 RETURN 2 RETURN 3 RETURN 4 RETURN 5

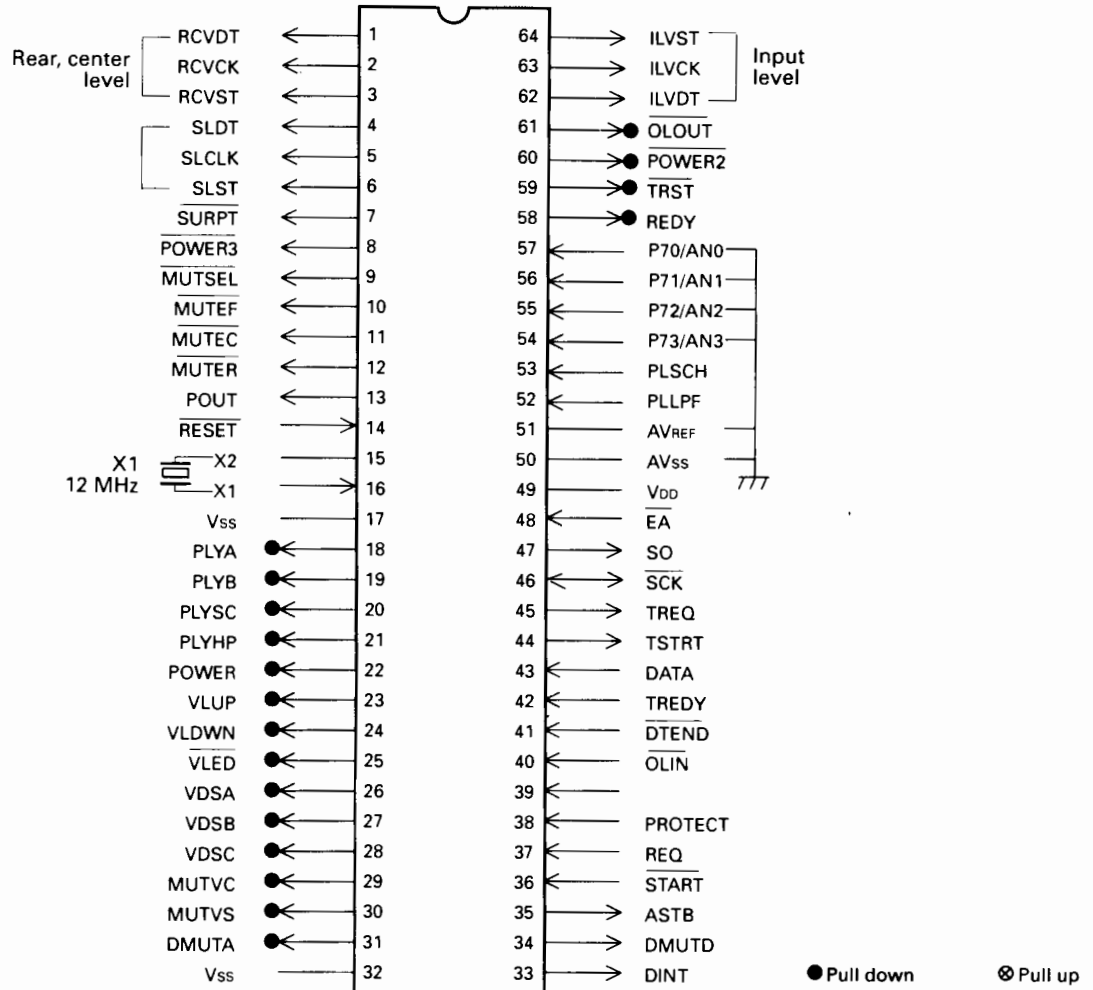


*For a description of the Micro-Processor (CXP50112-342Q) circuitry, see page 6 of the A-85 Service Manual (B51-4343-00).

CIRCUIT DESCRIPTION

System control microprocessor : μ PD78214CW

Terminal connection diagram



Pin function

Pin No.	Pin name	I/O	Name	Description
1	P03	O	RCVDT	Rear, center electric volume
2	P04	O	RCVCK	TC9213P control pin CK signal
3	P05	O	RCVST	STB signal
4	P06	O	SLDT	Switch array IC DATA signal
5	P07	O	SLCLK	TC9162N, 9163N CK signal
6	P67	O	SLST	TC9164N control pin ST signal
7	P66	O	SURPT	Surround (DSP IC) oscillate control H: Stop L: Oscillate
8	P65	O	POWER3	Port used to synchronize with the timing of the power up of the D/A converter
9	P64	O	MUTSEL	Selector mute pin H: MUTE OFF L: MUTE ON
10	P63	O	MUTEF	Front signal mute pin H: MUTE OFF L: MUTE ON
11	P62	O	MUTE C	Center signal mute pin H: MUTE OFF L: MUTE ON
12	P61	O	MUTER	Rear signal mute pin H: MUTE OFF L: MUTE ON
13	P60	O	POUT	Pin that notifies the main μ -com of protection detection
14	RESET	I		Reset pin

CIRCUIT DESCRIPTION

Pin function

Pin No.	Pin name	I/O	Name	Description
15	X2			System clock oscillator connect pin
16	X1 /	I		
17	V _{SS}	O		Gnd
18	P57	O	RLYA	Speaker A relay control pin L: Power OFF H: Power ON
19	P56	O	RLYB	Speaker B relay control pin L: Power OFF H: Power ON
20	P55	O	RLYSC	Speaker (SURROUND CENTER) relay control pin L: Power OFF H: Power ON
21	P54	O	RLYHP	Headphone relay control pin L: Power OFF H: Power ON
22	P53	O	POWER	Powersupply control pin L: POWER OFF H: POWER ON
23	P52	O	VLUP	Master volume UP control pin
24	P51	O	VLDWN	Master volume DOWN control pin
25	P50	O	VLED	Master volume LED control pin L: LED ON H: LED OFF
26	P47	O	VDSA	Video selection control pin
27	P46	O	VDSB	
28	P45	O	VDSC	
29	P44	O	MUTVC	
30	P43	O	MUTVS	S ch video mute control pin MUTE is OFF only entered the VIDEO 3 mode
31	P42	O	DMUTA	DSP analog mute control pin SURROUND ON: MUTE OFF SURROUND OFF: MUTE ON When switched : MUTE ON
32	V _{SS}			Gnd
33	P41	O	DINT	No used
34	P40	O	DMUTD	DSP digital mute control pin
35	ASTB			No used
36	P20/NMI	I	START	START signal input pin for communicating to main μ -com
37	P21	I	REQ	REQ signal input pin for communicating to main μ -com
38	P22	I	PROTECT	Protection signal detection pin
39	P23			No used
40	P24	I	OLIN	Over level signal detection pin
41	P25	I	DTEND	DTEND signal input pin for communicating to DSP IC control μ -com
42	P26	I	TREDY	TREDY signal input pin for communicating to DSP IC control μ -com
43	P27/SI	I	DATA	DATA signal input SI port of communicating to main μ -com
44	P30	O	TSTRT	START signal output pin for communicating to DSP IC control μ -com
45	P31	O	TREQ	REQ signal output pin for communicating to DSP IC control μ -com
46	P32/SCK	I/O	SCK	SCK I/O pin for communicating to main μ -com and DSP IC control μ -com
47	P33/SO	O	SO	SO signal output pin for communicating to DSP IC control μ -com
48	EA			No used
49	V _{DD}			Power supply pin
50,51	AV _{SS} , AV _{REF}			No used
52 ~57	P75 ~ P70	I		No used
58	P34	O	REDY	REDY signal output pin for communicating to main μ -com
59	P35	O	TRST	DSP IC control μ -com reset pin
60	P36	O	POWER2	Port used to synchronize with the timing of the power up of the D/A converter
61	P37	O	OLOUT	Over level output pin L: FL light H: FL not light
62	P00	O	ILVDT	Input level electric volume DATA signal
63	P01	O	ILVCK	CK signal
64	P02	O	ILVST	ST signal

	V1	V2	V3	V1 - V3: input of VIDEO 1 - VIDEO 3
VDSA	0	1	1	
VDSB	1	0	1	
VDSC	1	1	0	

Monitor
OUTCOMPOSITE
S-OUT

V1

V2

V3

-

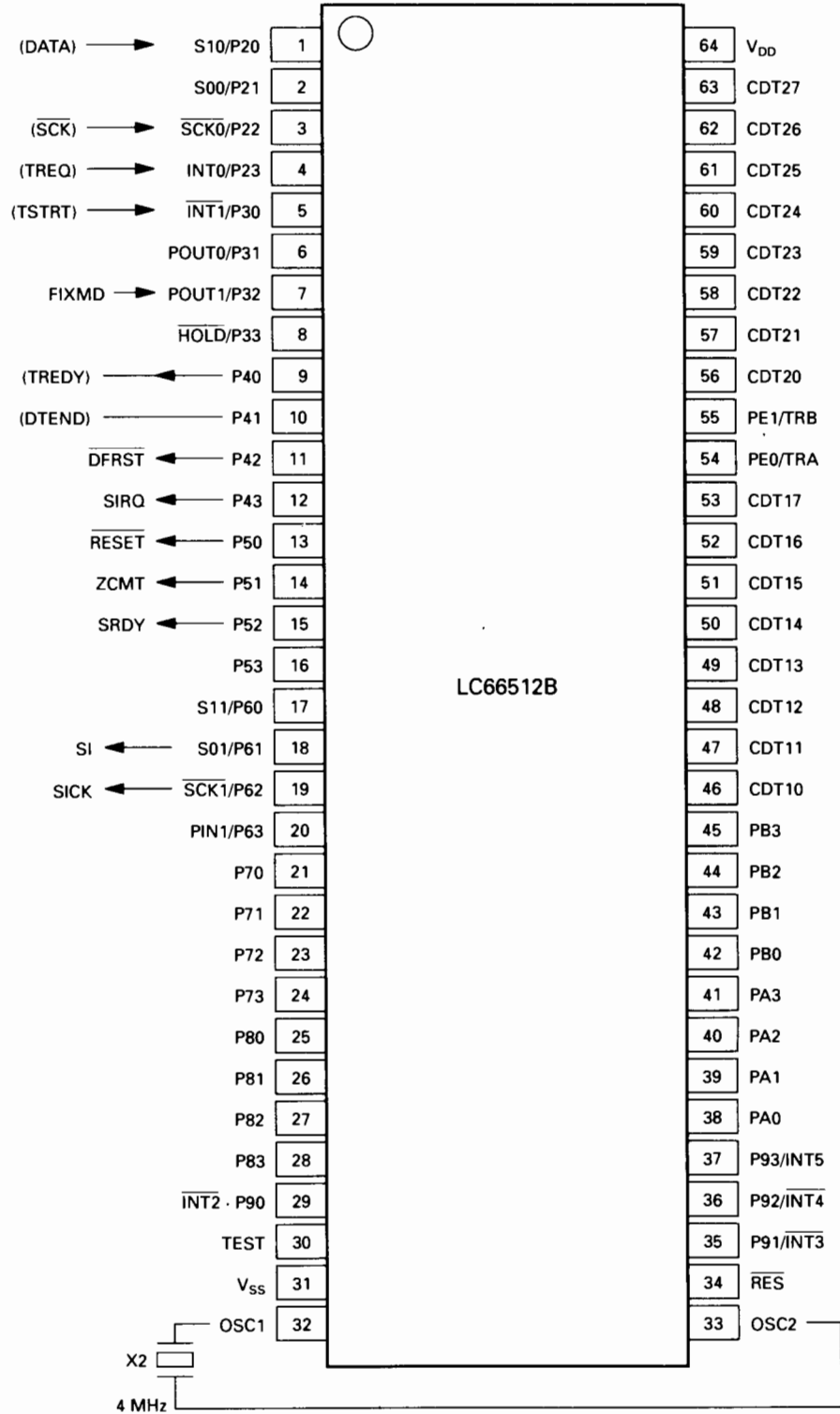
V2

V3

V3

CIRCUIT DESCRIPTION

DSP μ -Com: LC66516B



CIRCUIT DESCRIPTION

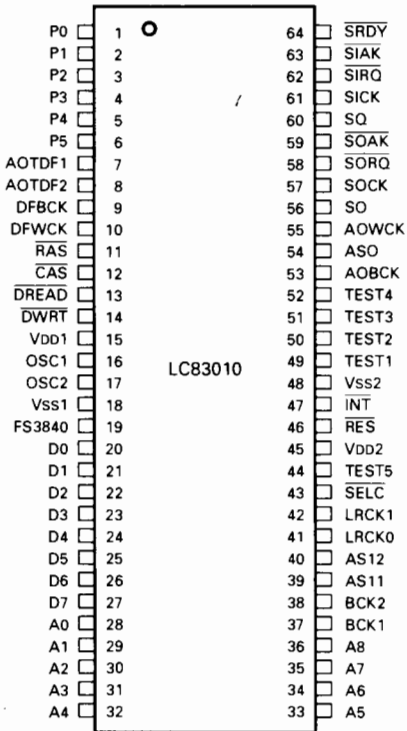
Pin function

Pin No.	Pin name	I/O	Name	Description
1	SI0/P20	I	DATA	DATA signal input pin from system control μ -com
2	SO0			No used
3	$\overline{\text{SCK}}$ /P22	I	$\overline{\text{SCK}}$	Clock signal input pin from system control μ -com
4	INT0/P23	I	TREQ	TREQ signal input pin from system control μ -com
5	INT1/P30	I	TSTRT	TSTRT signal input pin from system control μ -com
6	Pout0/P31	I		No used
7	Pout1/P32	I	FIXMD	Fixation terminal mode setting pin. Low: Normal mode High: Fixation terminal mode
8	$\overline{\text{HOLD}}$ /P33	I	TSTRT	HOLD mode control input
9	P40	O	TREDY	TREDY signal output pin to system control μ -com
10	P41	O	DTEND	At mode change (command 0 ~ 2) and during clear the DRAM, transfer the data to DSP IC.
11	P42	O	$\overline{\text{DFRST}}$	Digital filter reset signal output pin (Normally High)
12	P43	O	SIRQ	DSP IC LC83010 SIRQ signal output pin
13	P50	O	$\overline{\text{RES}}$	DSP IC LC83010 Reset signal output pin (Normally High)
14	P51	O	ZCMT	Zero cross mute control signal output pin
15	P52	O	SRDY	DSP IC LC83010 SRDY signal output pin
16,17	P53, SU/P06			No used
18	SO1/P61	O	SI	DSP IC LC83010 SI signal output pin
19	$\overline{\text{SCK1}}$ /P62	O	SICK	DSP IC LC83010 SICK signal output pin
20 ~ 28	PIN1/P63 P70 ~ P73 P80 ~ P83	O		No used
29	$\overline{\text{INT2}}$ /P90			DSP IC LC83010 SIAK signal input pin
30	TEST			CPU test pin. Connected to V _{ss} .
31	V _{ss}			GND pin
32	OSC1	I		System clock oscillator pin
33	OSC2	O		System clock oscillator pin
34	$\overline{\text{RES}}$	I		System reset signal input pin
35 ~ 37	P91 ~ 93 $\overline{\text{INT3}}$ ~ $\overline{\text{INT5}}$			No used
38 ~ 45	PA0 ~ PA3 PB0 ~ PB3	I I		No used
46 ~ 53	PC0	I	CDT10 ~ 17	Correspond to bit 0 ~ 7 of data address 1 of command data in the fixed pin mode.
54	PE0/TRA	I		Correspond to 2 low-order bits of command data in the fixed pin mode. The fixed pin mode can be set to 00, 01, 02 or 03.
55	PE1/TRB	I		
56 ~ 63	P35	I	CDT20 ~ 27	Corresponds to bit 0 ~ 7 of data address 2 of command data in the fixed pin mode.
64	V _{DD}			Power supply

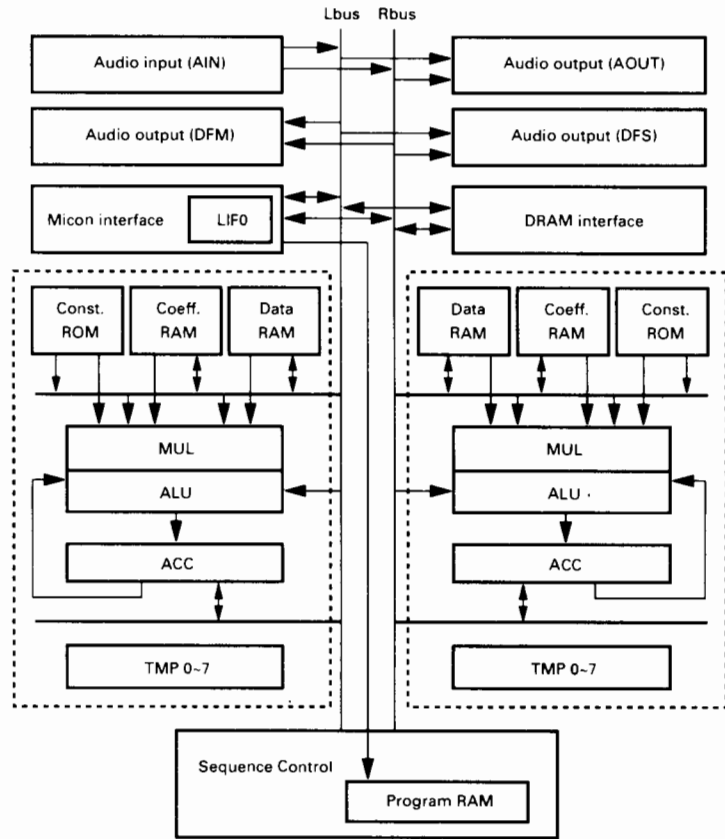
CIRCUIT DESCRIPTION

DSP IC : LC83010

Pin connection



Block diagram



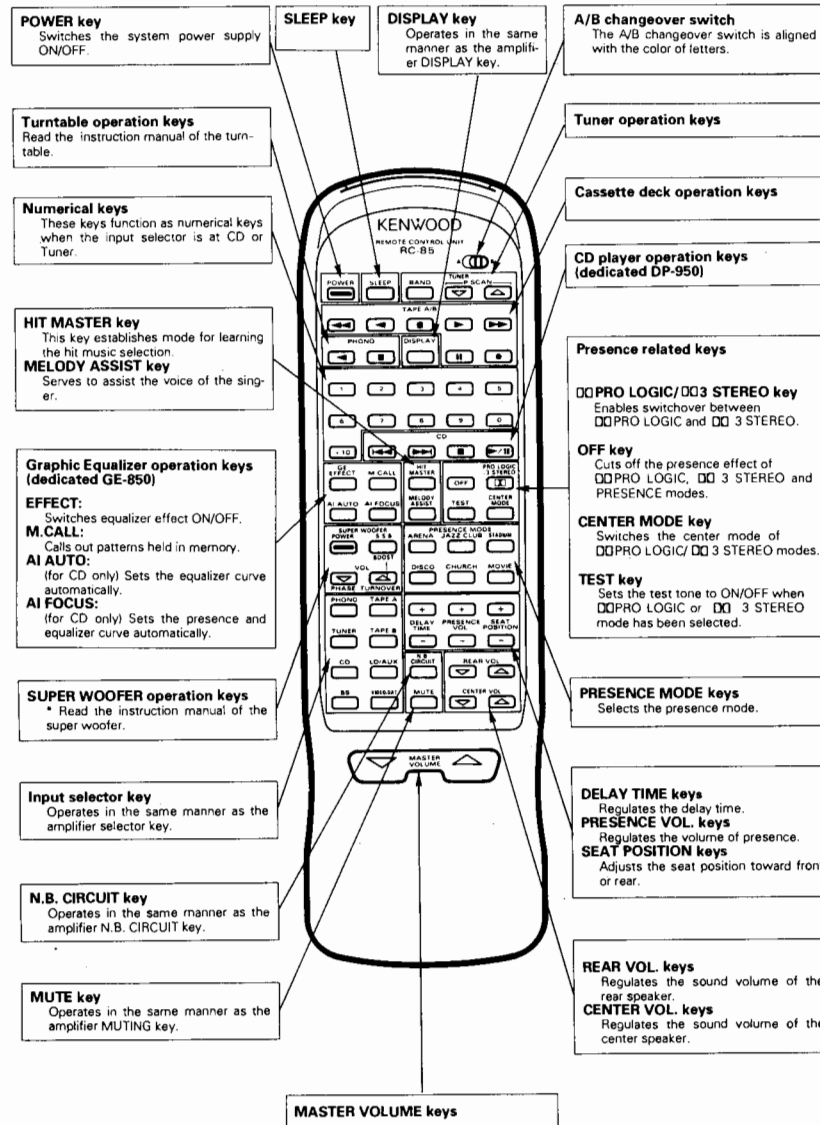
CIRCUIT DESCRIPTION

Pin function

Pin No.	Pin name	I/O	Description	
1	P0	I	Digital mute - High: mute; Low: unmute during DSP program	
2	P1	I	Soft muting - High during DSP program: Soft mute with time constant of 1 ms; Low: Unmute	
3	P2	O	Overflow detection If the input data from the A/D converter becomes the maximum positive or negative value a low signal is output, held for 100 ms, and goes high.	
4	P3	I	Phase shifter control The phase shifter is turned on and off during 3-channel sound field program. Low: on; High; off. Always used with "LOW".	
5	P4	I	Direct sound add control Control whether direct sound is added in the DSP during sound field program. High: Add; Low: Do not add. Always used with "LOW".	
6	P5	I/O	General input/output port No used (open)	
7	AOTDF2	O	Audio data output 1 C ch and S ch data is output during Dolby pro logic and 4-ch sound field. If 3 stereo and 3-CH are set, only C ch data is output.	
8	AOTDF2	O	Audio data output 2 Decoded L/R data is output for Dolby. The L/R sound field signal is output for sound field.	
9	DFBCK	O	Bit clock for AOTDF 1 and 2 48 fs bit clock is output.	
10	DFWCK	O	Word clock for AOTDF 1 and 2 No used	
11	$\overline{\text{RAS}}$	O	For row address strobe DRAM access control	
12	$\overline{\text{CAS}}$	O	For column address strobe DRAM access control	
13	$\overline{\text{DREAD}}$	O	DRAM read control signal	
14	$\overline{\text{DWRT}}$	O	DRAM write control signal	
15, 45	VDD1, 2	I	Power supply pin	
18, 48	VSS1, 2		GND pin	
16	OSC1	I	Crystal oscillator pin	
17	OSC2	O	Crystal oscillator pin	
19	FS3840	O	384fs output pin	
20 ~ 27	D0 ~ D7	I/O	DRAM data I/O pin	
28 ~ 36	A0 ~ A8	O	DRAM address output pin (A8 is no used)	
37	BCK1	I	No used	
38	BCK2	O	Bit clock output pin 32fs bit clock output for A/D	
39	ASI1	I	No used	
40	ASI2	I	Audio data input pin 2 Data input from A/D	
41	LRCKO	O	L/R clock output pin	
42	LRCKI	I	No used	
43	$\overline{\text{SELC}}$	I	Self oscillation and external clock input switching	
44	TEST 5	O	Test pin Used by open	
46	RES	I	Reset pin	
47	$\overline{\text{INT}}$	I	No used	
49 ~ 52	TEST 1 ~ 4	I	Test pin Connected to GND	
53	AOBCK	O	No used	
54	ASO	O	Audio data output (overflow detection) Used by the the KR-V9030 to detect overflow for Dolby.	
55 ~ 59	A0WCK etc.		No used	
60	SI	I	Serial data input from μ -com	DSP \leftrightarrow μ -com interface
61	SICK	I	Serial clock input of SI input	
62	$\overline{\text{SIRQ}}$	I	SI request signal input	
63	$\overline{\text{SIACK}}$	O	Output signal to indicate that the SI serial communication is executing	
64	$\overline{\text{SRDY}}$	I	Input signal to indicate that the mail box communication is finished	

REMOTE CONTROLLER

The illustration for the Remote Controller depicted in the A-85 Service Manual (B51-4343-00) is NOT correct. Use the illustration shown below in it's place. The part numbers however, are the same.



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SERVICE TECHNICAL REPORT

KENWOOD

KENWOOD CORPORATION

Home Car A.R LMR/Marine

NO. E 1 1 - 9 1 - 0 0 9 1/

MODEL	A - 8 5	DATE	September 2nd, 1991
SUBJECT	No output with the Dolby surround switch or DSP presence switch ON/OFF		
CONTENTS	REFERENCE: B 1 1 - 9 1 - 0 1 1		

[Symptom] If the dolby surround switch or the DSP presence switch is turned ON, OFF, then ON again, no sound is sometimes output.

[Cause] SIAK (communication flag) of the DSP control μ -com (LC66516B) and DSP IC (LC83010N) interface is unstable when the DSP presence is turn ON and OFF. Consequently, DSP IC CLK ON \leftrightarrow OFF switching becomes unstable.

[Countermeasure] To stabilize SIAK, retain the ON state of DSP IC CLK that currently changes from ON to OFF.

In other words, cut X32-2030-XX B/2 W155.

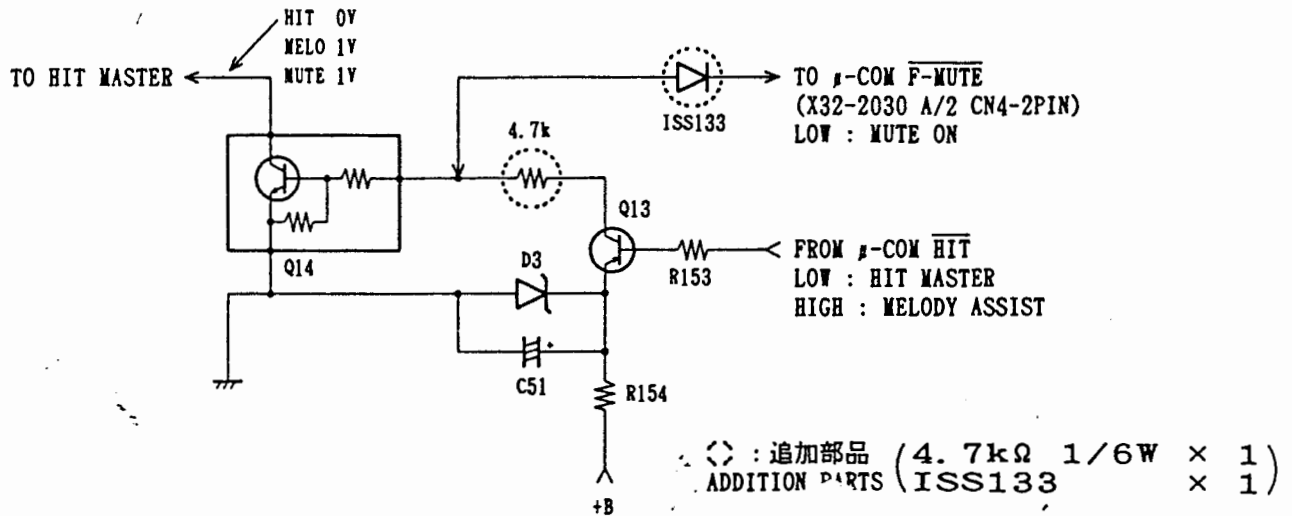
The above counter measure is already done in the latter sets of the August production lot. Countermeasure-applied sets are indicated by "1" stamped on the carton box. As a permanent countermeasure, the DSP control microcomputer will be modified. .

※ Parts stock: YES, NO, Delivery:

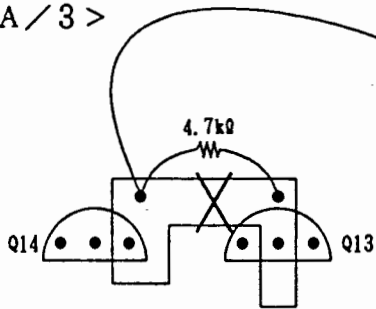
Remarks	Prod. change	S/N	109 xxxxx
	Application	<input type="checkbox"/> All repair units	<input checked="" type="checkbox"/> Defectives only <input type="checkbox"/>
	Parts included	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> Mail
Service code A: 02 B: X32-2030 C: W155 D: 91			

Distribution	<input checked="" type="checkbox"/> U.S.A. (3ヶ所)	<input checked="" type="checkbox"/> U.K.	<input checked="" type="checkbox"/> ショールーム	<input checked="" type="checkbox"/> 第3課	MANAGER <i>KUMESHI TA</i> WRITER
	<input checked="" type="checkbox"/> CANADA	<input checked="" type="checkbox"/> ITALY	<input checked="" type="checkbox"/> 相談室	<input checked="" type="checkbox"/> 営業管理 S	
	<input checked="" type="checkbox"/> GERMANY	<input checked="" type="checkbox"/> AUSTRALIA	<input type="checkbox"/> 部品 S	<input type="checkbox"/> 通、営業課	
	<input checked="" type="checkbox"/> BELGIUM	<input checked="" type="checkbox"/> SINGAPORE	<input type="checkbox"/> 教育担当	<input type="checkbox"/>	

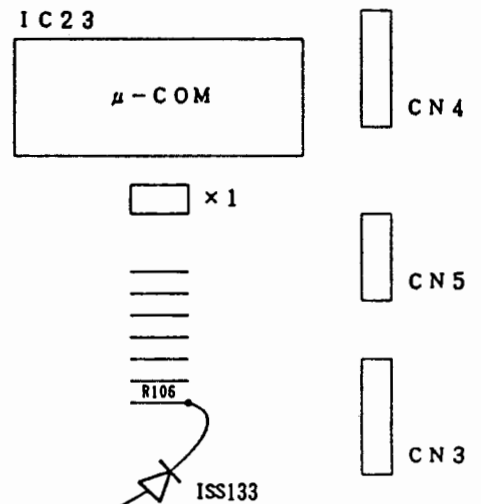
[Circuit change] X 0 8 - 2 4 7 0 A / 3



< X 0 8 A / 3 >



< X 3 2 A / 2 >



- ① Cut the pattern connecting between Q13's collector and Q14's base, and connect them via 4.7 kΩ.
- ② Draw a thin lead from Q14's base and connect it via a diode to R106 of side near CN3 in upper part board (X32- A/2).

SERVICE TECHNICAL REPORT

KENWOOD

KENWOOD CORPORATION

1/1

STR No. E11-92-006

REFERENCE. B11-92-006

HOME GENERAL

MODEL : A-85 DATE. May 19, 1992

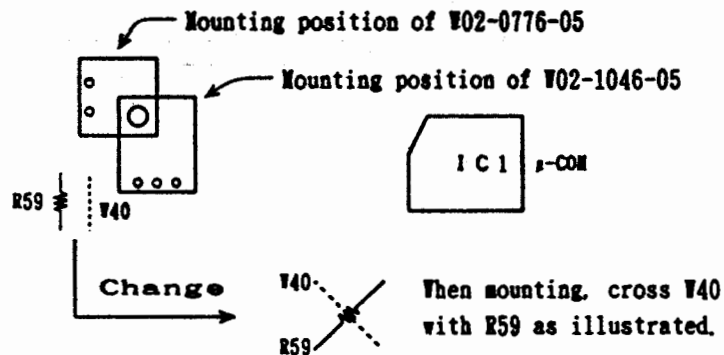
SUBJECT: Choice of the remote control sensor

(Symptom) Either W02-0766-05 or W02-1046-05 is designated to be used for the remote control sensor (A1) of the A-85. But it was found that the remote controller does not work with W02-0766-05.

(Cause) The remote sensor W02-0766-05 has two terminals and the W02-1046-05 has three terminals. The patterns and silkscreens printed on the two sensors are such that the sensors are soldered 90° rotated about the light receiving hole relative to each other. No problem is caused by using W02-1046-05 since it is an original part. But the pattern for W02-0766-05 is incorrect; +B and out put are opposite.

(Countermeasure) Use W02-1046-05.

If it is unavailable by any means, change the pattern.



Parts included No Yes Mail Service code

Parts stock Yes No Delivery Charge Free of charge A(S) : 55 B : X11-315x

Prod. change Lot S/No. C(P) : J70 D(C) : 91

Application All repair units Defectives only MANAGER *K. Nagashima*

Distribution サービス部(相談室, 部品S, 教育S, テクニカルS) ショールーム
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 WRITER *K. Kato*

